

---

**ПРОБЛЕМЫ ОБРАЗОВАНИЯ**


---

**UNIVERSITY AND THE FUTURE:  
HIGHER EDUCATION, GLOBALIZING WORLD ECONOMY AND «CRISIS»**


---

KOVRIGA Alexander, doctor of economics, director of the Center for Interdisciplinary Social Forecasting, Deputy editor of Journal "Social Economics", V. N. Karazin Kharkov National University

---

*«The hidden hand of the market will never work without a hidden fist. McDonald's cannot flourish without McDonnell Douglas, the designer of the F-15. And the hidden fist that keeps the world safe for Silicon Valley's technologies to flourish is called the US Army, Air Force, Navy and Marine Corps».*  
Thomas L. Friedman<sup>1</sup>

*«To be safe democracy must kill its enemy when it can and where it can. The World can not be half democratic and half autocratic».*  
Elihu Root  
(during WWI time)

*«... the production of subjectivity is at the basis of any production whatsoever».*  
Félix Guattari

**1. «Global Economy» and University. University, Inc. and the Global Financial Crisis**

**2. The «World-Production» Centrality of American University. American or Global University System?**

**Doctorates production – is a high tech line of the American (Global) University System. The Power of Human Capital Imperative**

**3. University's Endowments Formative Role.**

**From beneficence to the Intelligent Core of (Global) «Shadow Banking». Endowments and Wall Street «Imageries».**

**4. The «Wall Street Rule»? Billion Dollar Endowment Club.**

**Crisis-lead transformations? The widening of reproduction of business as usual**

**5. The Wall Street Power Projection. Wall Street culture reproduction by Re-formatting Universities?**

**Deeply-rooted material and strategic relations of Wall Street world and University & Academia reproduction.**

**Університет и будущее: высшее образование, глобализирующаяся мировая экономика и «кризис».**

---

© Коврига А.В., 2015

<sup>1</sup> Thomas L. Friedman. *A Manifesto for the Fast World*. The New York Times. March 28, 1999. <<http://www.nytimes.com/1999/03/28/magazine/a-manifesto-for-the-fast-world.html>> Retrieved on 2012-06-19. Thomas L. Friedman is the foreign affairs columnist for The New York Times.

**1. «Глобальная экономика» и Университет. Университет как корпорация и Глобальный финансовый кризис.**

**2. Центральность американского университета в «производстве и воспроизводстве мира».**

**Американская или глобальная университетская система? Производство докторов наук и экономистов – ведущая высокотехнологичная линия Американской (Глобальной) университетской системы. Глобальная власть (сила) императива человеческого капитала.**

**3. Роль университетских эндаументов (инвестиционных фондов).**

**От выгодополучателей до интеллектуального ядра (Глобальной) «Теневой банковской системы». Университетские эндаументы и «Проектные воображения» Уол Стриит.**

**4. Прямое «Правление Уол Стриит»?**

**Клуб эндаументов миллиардеров. Трансформации управляемые кризисом?**

**5. Проекция мощи Уол Стриит.**

**Воспроизводство культуры Уол Стриит через переформатирование институциональной организации университетов? Глубоко-укоренённые и стратегические отношения мира Уол Стриит и воспроизводства университетского и научно-академического дела.**

## **1. «Global Economy» and University. University, Inc. and the Global Financial Crisis**

The main task of this paper is to start the discovering of complex reality of interwoven links and relations between the sphere of higher education, globalizing world economy and their «crisis».

At this historical moment of development of noosphere, which is widely regarded as global financial-economic crisis, all attention of scholars, policy makers and thoughtful strategists is absorbed by analysis and design of different kind of measures devoted to «fixing the economy». The major concern is to furnish already working Grand Strategies and existent institutional arrangements so that, as it is envisaged, would safe 'national' and 'global economies', return to status quo and facilitate new 'economic growth'.

However, all those anti-crisis measures will remain fictitious and counterproductive until they take into account deep material structures and relations that underlie the world of «financial» & «economic» relations and exchange & transaction. These relations and their structures produce and reproduce themselves by financial-economic transactions. For existence and reproduction of these relations they require «antropo-production» activities in functions of *higher education and professions*. In order to overcome the «crisis», we must move beyond the world political economy, we need to disclose these deep structures and relations and set our world free for development through thoughtful redesign and reconstruction of these structures.

The «global economy»<sup>2</sup> cannot hold together without work of certain *knowledge infrastructure*, without an active *higher education policy* and particular type of *noö-politics* realized through the «*global university system*».

In that sense university system plays not less important role than those «hidden systems» indicated by Thomas Friedman. And the real work of the university system is similarly deeply 'hidden' and hard to catch in terms of its' multi-dimensional impact on societal production and reproduction. It would not be possible to build and expand «global economy» and global financial industry without certain type of cognitive and epistemic super- and infra-structures, without specific cultural and educational support mechanism, and without institutionalization of certain kind of 'general intellect'.

<sup>2</sup> We use commas here in order to stress some kind of notional uncertainty and heterogeneity in material definition of particular terms.

In order to go further, global finance has to set ahead certain (widely shared) worldviews. It can only rely upon definitive, globally accepted meanings, based on certain understandings of (historical), social and economic processes. To operate globally – financial industry and «economy» require specific human characters, subjectivities, skills and abilities.

All processes of unfolding global crisis occur in the framework of given complex of ultra- and infra-structural material conditions (of relations of societal reproduction). But where all these conditions and relations came from? How do they appear? Whither it is possible and how we can manage their functioning?

The major and most important institution acting here is higher education. These conditions and structured relations overwhelmingly are produced and reproduced by the «**global university system**».

Higher education as a core of world knowledge infrastructure provides *fundamental conditions* for maintenance of standing order and reproduction of global financial-economic regime. All of that means that any kind of principle structural changes and even entire *possibility to act upon future* are only possible via strategic work in and with the sphere of higher education.

The acting knowledge infrastructure and university system not just institutionalize the complex of existential conditions for global economy. In fact, as a *co-production*, it also re-generate challenges and problems of humanity, reproduces cognitive frameworks of global economic and civilizational crisis.

The most complex mission of the university is to serve humanity's ontological process and provide worldview that gave reason to common life and development. University may facilitate to or prevent from understanding of what is going on, what kind of future may or should be and how to build it. All societal and globalization legitimate processes are interwoven with university's practices. This is really societal organ for those vital functions.

We entered into epoch of productive centrality of the university. We are going to show how it is important to disclose and comprehend the centrality of the global university system – as we title it here – the University, Inc., to crisis tendencies and strategies.

## 2. The «World-Production» Centrality of American University

In order to reveal current role and real standing order of university in its extremely complex relations with global crisis we need at least briefly look at the institutional evolution of university in recent decades.

Although historically there were always some diverse 'models' of institutionalization of higher learning and universities in different countries, we are referring here to mainstream institutional process of university development. Yet there are no total homogenization of patterns of universities institutionalizations, certain global trends prevail and ecologically dominate.

The legendary First Chancellor of the University of California, Berkeley professor Kerr Clark in his landmark book *The Uses of the University* (1963) brightly described **the centrality of the university** and its knowledge workers for 'advanced' capitalist economies.

Today we need to go deeply and pursue more broaden analysis not just 'horizontal' linkages of universities-knowledge-workers-and-capitalist-economies, but «vertical» connections and trans-system relations which are binded with different assets and material forces of the «world economy». With that approach we should reconsider and step away from looking at American university system and its leading universities as exclusively «national» creatures, as self-containing object, separated from the rest of the world and relying exclusively on its own resources and acting predominantly upon national economy.

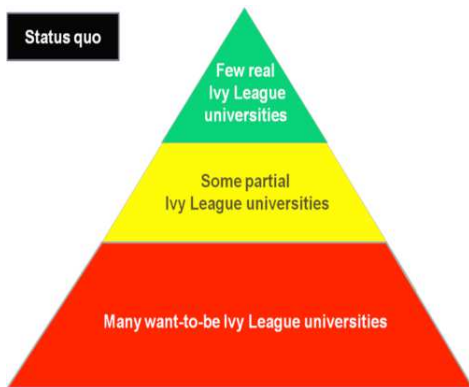
Our point is that we should recognize that the U.S. leading universities (first of all of so-called Ivy League) comprehensively seized the position of central element in mechanism of **reproduction of American-Wall-Street style capitalism worldwide and possess «world-production» centrality**.

The Ivy League lies at the core and is a belt of about 50 universities. It educates the top 1% of the 20 million of U.S. higher education students and smaller proportion of world's elite students. However, in terms of worldview-standard-setting power, professional paradigm production capacities, and formative influence on public perception and therefore on the modes of societal reproduction, we can treat them as hegemonic element of gigantic worldwide university pyramid. See this relations pictured on the Scheme 1.

There is certain (near) *global system of university's meritocracy* – among which such infrastructure's elements as the Royal Bank of Sweden prizes (widely known as Nobel's prizes), professional academies, honorable titles and private foundation's money awards, global ratings of different kind and prestige, alumni associations and media celebrities instruments for production of experts, public intellectuals and academics etc.

However, as we tend to show, the unspoken, latent, but the most lucrative and powerful element of that meritocracy is *the linkage* between institutional complex of Wall-Street-Capitalism and population of *leading private universities endowment's funds*.

Scheme 1



In this environment Harvard University stands as America's most meritocratic and highly self-regarded higher education institution. And, in this regards, as the most deeply and organically integrated with Wall Street complex.

During last 40 years the dominant role in the global university's ecological system has been promoted particular type of university – those that most deeply involved into institutionalization of global economy, as process guided by Wall-Street capitalism!

Throughout most of today's higher education policy debates there was an implicit or explicit assumption that American research university is the «model» of what should be built to succeed in globalizing market economy – it serves as a model even in negative meaning – as not achievable in current structure of strategic relations for absolute majority of people and countries. So, to be a «normal university» you should readjust all of your culture and practices to made-in-USA-university patterns.

There are grubbing institutional mimesis process and struggle of countries and higher learning institutions around the world to better emulate the U.S. model. The tendency of permanent worldwide restructuring of all kind of higher learning institutions into homogenized global U.S.-led university machine reinforces Wall Street capitalism and American dominance.

The global university system of last decades is constructing around an «American model» deeply rooted in relations of competition and «social Darwinism» will be one in which leading institutions rise at the expense of others. In this race to become world-class-university-like-American the U.S. and its leading universities use so called «first-mover advantage». Once the top position has been taken it is easier to keep it and harder for others to get there. And crucial strategic relations is to keep established order, and erect barriers to entry into the top rungs of higher education all others. The «best universities» in the world attract the «best graduate students» in the world, and naturally established university with a full complement of active scholars carry automatic advantages for academic jobs and tend to engage the «best scholars», coming from all corners of the world.

The **financialization and institutional mimesis** serves as key and most powerful instruments here. As soon as institutional structure of higher education worldwide incorporates (in

its heterogeneous package) **the financial relations** among the core, it became strategically easier to control this sphere through Wall Street and related institutions.<sup>3</sup>

To investigate what is going in the sphere of higher education we need to look at the American higher learning industry – as a complex of linkages and strategic relations with the Wall Street and the world itself.

As institution university is not just involved into legitimation of societies, but it **permanently thrives to legitimate itself** in a line with dominant historical trends of development of material relationships of societal reproduction, and therefore with dominant noö-politics and prevailing world-views.

In the post World War II period American university involved in realization of Grand Strategy and served to profound transformation aimed to shape an Open Door world – open societies and open national economies – under liberal ideology. And this doctrine self-consciously rests on the conviction that the United States is a model for the world and that its values and institutions superior to everyone else's.<sup>4</sup>

This exogenous transformative practice tremendously changed the institutional nature of a university itself. The neo-liberal, globally standing university, as we know it today is the result of institutional reformation guided by neoliberalism (with the most active period since the crisis started in the 1970s).<sup>5</sup> The institutional development of U.S. elite universities tightly interwoven with and guided by the Wall Street – **university finance and endowments became crucial element of global financial industry.**

The institutional development of the American elite universities tightly interwoven with reproduction of world's «economic» imageries, its strategic relations, and hierarchically linked to the Wall Street (reproduced and guided by its dominant economic and noöpolitical imaginations).

#### **American or Global University System?**

Traditionally, most of Western researchers and policy makers with quasi-religious commitment strive to demonstrate and re-project American Research University and American University System as a distinct and self-contained unit, (basically) are separated and separate themselves from the rest of the world.

Statements of such type as following are the normal practice: the status of the U.S. in the «world higher education ecosystem longstanding place atop the global pecking order. American research universities remain where they have been since the end of the World War II, dominating the top rungs of the world universities».<sup>6</sup>

These approaches constantly ignore the increasing presence within the American higher education ecosystem representatives of other university systems, cultures of thought, practices and scientific schools, and other multi-dimensional linkages with entire human noosphere, and processes of its global developments. These linkages of co-production of complex web of higher learning relations and cooperative knowledge development are numerous, yet mostly not calculable and invisible for narrow economic and naturalized worldview.

The fundamental argument we make in this report is quite simple. We argue that **the «American University System» is exterritorial.** And the American University System is the result of ongoing interplay of deep material structures of world-reproduction and self-interested projection of American institutional patterns around the world, resulting in hierarchical but U.S. centered global university system. This «system» could only be reproducible on a «worldwide scale»,

<sup>3</sup> World Bank Group, OECD, WTO and other institutions developed extensive practices of higher education institutional building, financing and management.

<sup>4</sup> Hunt H. Michal. (1987). *Ideology and U.S. Foreign Policy*. New Haven: Yale University Press, p. 176.

<sup>5</sup> It happened in parallel with privatization of control over monetary policy with large international banks such as Citibank, Chase Manhattan and Barclays Bank. Since that time «market forces» played central role in defining the value of dollar, commodities and businesses and massively penetrated into higher education.

<sup>6</sup> Clotfelter Charles T. (Ed.). (2010). *American Universities in a Global Market*. National Bureau of Economic Research. University of Chicago Press. – 413 p.

through multi-dimensional incorporation of all human noösphere. Therefore, those object that we conventionally treat as American University and its System is appeared just a tip of invisible but *global orientation, imagination, perception and talent management machine, which imports, engage and utilize the most active and talented students and scholars from the whole world.*

For, American University System is increasingly occupying the role of central element in such broad world-societal purpose-function as *the 'construction' and reconstruction of the world and «world economy»* itself – via providing dominant worldviews, knowledge production regimes and technocratic training to the «world's elites».

Dialectically speaking, **there are no American University System and American university per se**, it simply does not exist as particular societal unit. Actually, all of the leading U.S. universities and its entire population of higher learning institutions, conditionally taken as particular objects and institutional actors, represent just **specific dimension of cobweb of relations of world-reproduction**. These relations powerfully embrace the whole planet and manage heterogeneous circulating, of course highly asymmetrical, dialectical flows of talented applicants, graduates, alumnus and accompanied (cognitive & socio-political-economic) regimes and appropriate technological, natural and economic resources. Those different types of *incorporations of others* into American University System *systematically transforms and actively processes* all of these cultural, social and human (biotic) objects and resources.

The American university is crucial element of 'invisible' infrastructure integrating «the U.S. economy» with the rest of the world and its reproduction, with complex relationships of vital dependency on the flow of talented immigrants – both, as those who will naturalized in the U.S. after graduation, as well as those alumnus who (physically) will return to countries of origin but mentally, culturally and socio-economically *will continue* their integrated life and activity within the framework and rules of globalizing U.S. dominating «world economy».

By general estimates last several decades of the XXth century and into the first years of the XXIst was the best of times for American universities. The top U.S. research universities enjoyed an unmatched international reputation. Actually since World War II massive influx of scholars from Europe seeking refuge American universities occupied an unchallenged position of preeminence in the world.<sup>7</sup>

At the beginning of XXIst century through use of such special «radar system» as **world rankings** American universities further reinforced their preponderance. For, the countries and universities around the world engaged in grubbing-mimesis to copy a model of United States universities. The consequence is that institutional design, content of activities and practices of U.S. universities serve as crucial instrument of America's comparative advantage and dominance. In simple economic sense higher education become vital export of U.S. And these strategic relations are fundamental element of global order now.

The keeping of these relations in place considering as crucial base for national security in this century – university's predominance recognized as framework condition for «financial, military, intellectual, and moral leadership». This issue is among the **major concerns for top global strategists** now.<sup>8</sup>

---

<sup>7</sup> The key elements of institutional design of modern university took shape in Europe, and Europe retained unquestioned world leadership in scientific research through the nineteenth century. Extended comparison of the development of universities in the U.S. and Europe made by Windolf P. (1997). *Expansion and Structural change: Higher Education in Germany, the United States, and Japan, 1870– 1990*. Boulder, CO: Westview Press; see as well Noll Roger G. (ed.). (1998). *Challenges to Research Universities*. Washington, DC: Brookings Institution Press, pp. 2–3.

<sup>8</sup> «American research universities have enjoyed a wonderful century, rising from a distinctly inferior status to world domination. But in the waning years of this golden age of American science and engineering, the future of these institutions is in doubt» – Noll Roger G. (ed.). (1998). *Challenges to Research Universities*. Washington, DC: Brookings Institution Press, p.1; some earlier warnings stated by academics in the report: US National Academy of Sciences, Committee on Science, Engineering, and Public Policy. (2007). *Rising*

The world's proportions enrollments and direction of students' flows in last decades changed significantly. All these processes in a meaningful way linked to financial flows and expansion of financialization. We may even say that students and scholars movement by a large degree directed by the financial instruments.

**TABLE 1**  
**Millions of enrollments and shares of world enrollments in higher education, including enrollments for less than four years, by country, 1970–2006**

	1970	1980	1990	2006
<b>Millions of enrollments</b>				
World	29.4	55.3	67.6	141.5
United States	8.5	12.1	13.7	17.5
Other advanced	4.9	8.2	12.9	29.5
Developing a	16	35	41	102.5
China	0.1	1.7	1.8	23.4
<b>Shares of world enrollments (%)</b>				
India	2.5	3.5	5	12.9
United States	29.0	22.0	20.0	12.0
Other advanced	16.7	14.8	20.3	17.7
Developing a	54.4	63.3	60.7	72.4
China	0	3.1	2.	16.5
India	8.5	6.3	7.4	9.1

Source: UNESCO, online files:  
[http://stats.uis.unesco.org/TableViewer/tableView.aspx?ReportId\\_47](http://stats.uis.unesco.org/TableViewer/tableView.aspx?ReportId_47);  
<http://www.uis.unesco.org/en/stats/centre.htm>;  
<http://www.uis.unesco.org/pagesen/DBGTerIsced.asp>.

A Developing indicates developing and other countries beyond the United States and advanced. International Standard Classification of Education (ISCED) level enrollment in total tertiary.

The Table 1 shows the dynamic of college students' enrollment worldwide.

As that in 1970, approximately 29 % of the world's college students were in the United States, although the country had approximately 6 % of the world's population. The U.S. share of world college enrollments dropped rapidly so that by 2005 to 2006, the United States had 12 % of enrollments – about two-fifths of its 1970 share.

That is why so important as for the future of U.S. as for the humankind the global governance of higher education and an agenda of its development.

What kind of policies and instruments will be created and introduced nationally and globally? This is an issue of shaping the future of humankind.

The flow of students from abroad to American universities and the portion of graduate students is very critical factor. The number, quality and their suitability as researchers, and their desire to remain in the U.S. after graduation all define the institutional health and reproductive capacity of American universities.

But all aspects depend on conditions in the students' home countries and development the «home universities». If these conditions and institutions stature will go up it will directly affect American universities.

So the very any kind of changes and development higher education and research institutions outside the U.S. will impact on the international academic labor market and competitive position of American universities. The developments of higher education worldwide is considering as the ultimate threat to the continued preeminence of American universities.

This issue is at the core of American Grand Strategy interests. Because the education of foreign elite cadres of economists serves as fundamental instrument to pursue America's economic interests abroad. It reproduces an international order that is safe for the economic Open Door.

That means that the American universities competitive and secure position, and keeping an advanced university's capabilities safe are first line of U.S. «defensive perimeter». The number of foreigners willing and able to enroll in the U.S. graduate programs depends on the number of students who obtain appropriate undergraduate training and the availability and quality of graduate programs outside the United States.

Strategically the entire prospects for continued American preeminence in higher education significantly depends on the changes and improvement of university's practices abroad. First of all in the India and China are produce largest portion of the world aspiring scholars and researchers. At the beginning of XXIst century a number of countries engaged into this race to improve university's

practices. The most important question is what kind of strategic reference-point and objectives they will use.<sup>9</sup>

The reformation of European higher education under Bologna Process is actually an attempt to make European programs more closely resemble those of American universities. The uniformity of academic programs in line with the American model will make it easier for students to transfer between institutions.

Most of countries involved into race to have world class research university and have adopted policies with explicit incentives. Britain adopted ratings for departments. Now funding is linked to publication records. Germany allocated funds to universities primarily on the basis of quality of research. The salaries of professors in Chinese and Australian universities now related to publications and citations.<sup>10</sup> India created National Science and Engineering Research Board, patterned after the American National Science Foundation, and increased government funding for science and technology several times.<sup>11</sup> This year India adopted «Universities for Research and Innovation Bill 2012», which grants universities more autonomy in order to get fast track to international excellence. American standards and practices play the role of key institutional patterns. The «Universities for Research and Innovation Bill 2012» allow **more authority and freedom to generate monies** through student tuition and fees, licensing revenues and increase other types of commercial activities.

### **The University and Flows Scholars and Students: Numbers and Meaning**

There are numerous evidences of these strategic relations and tendencies.

We need to stress that all the numbers and statistics presented here and in the following text, should be considered as «conditional». That means that these indexes constructed under particular conception and may hide or just do not show real **complexity and asymmetry of relations** around foreign-born students, graduates, patents and university research activities, publications and technological innovations etc. However, we will use these data to present key tendencies and their framework structure.

Permanent inflow of foreign students to U.S. is the primary by-products of America's leadership in higher education and its crucial cause for leadership.

«America is a great nation built on the hard work and ingenuity of immigrants ... », reminded this June Rupert Murdoch, co-chair of the Partnership for a New American Economy.<sup>12</sup>

The «skilled and highly educated immigrants» are vital characteristic of the American style capitalism and play increasingly important role in country's development. It is quite well established tradition at American higher learning institutions to absorb and utilize intellectual resources from anywhere. The most famous story is the 1930s when the U.S. incorporated pre-eminent scientists escaping Nazi Germany and the ongoing WWII. This significantly enhanced American scientific capability.

The «skilled immigrants» and foreign graduate students as a proportion of the U.S. labor force have increased sharply since 1965, and especially after 1990. Foreign-born residents not only expanded the U.S. high-tech workforce but helped start new technologically advanced businesses.

---

<sup>9</sup> Clotfelter Charles T. (ed.). (2010). *American Universities in a Global Market*. A National Bureau of Economic Research Conference Report. The University of Chicago Press. Chicago and London, p. 20.

<sup>10</sup> Aisha Labi. (2008). Obsession with Rankings Goes Global. Chronicle of Higher Education, October 17, 2008.

<sup>11</sup> Shailaja Neelakantan. (2008). India to Double Spending on Scientific Research. Chronicle of Higher Education, December 4, 2008.

<sup>12</sup> At the beginning of 2000<sup>th</sup> the same kind of warnings expressed by Lawrence Summers, president of Harvard University and Chairman of Counsel of Economic Advisers to the President and coalition of the US academics representing 25 organizations and 95 individuals. See «Academics Warn of Crisis over Visa Curbs». Financial Times May 16, 2004. That the decline in foreign students threatens the quality of research coming from the U.S. universities



Reliance by the U.S. colleges and universities on foreign talent increased after collapse of the USSR in 1990s.

This way, American scholars dominated the 2009 Nobel Prizes for the sciences. Eight of the nine winners were the U.S. citizens, but five of those American winners are immigrants to the United States.<sup>13</sup> One quarter of American Nobel Prize winners since 1901 have been immigrants. We did not discuss the real meaning and spectrum of functions of existence of that award. This is a part of global reputation management mechanism that reproduces credentials and standing order around «American university system». Some scholars even believe that the institutions of modern science in crucial aspects are «a gift from the United States to the rest of the world».<sup>14</sup>

One of their most important functions of Nobel Prize award is the global perception management and construction of an image of meritocracy, the **reproduction of status-hierarchy and international consensus around true knowledge and worldview**.

Although it is well known «brain drain» practice, recent reports of the influential Partnership for a New American Economy<sup>15</sup> again and again advocating vital role of **attracting the world's top minds as a major condition for the U.S. to remain the world leading economy**.<sup>16</sup>

The production of technological innovations in Silicon Valley increasingly performed by immigrants or foreign-born engineers and PhDs. One third of all labor forces are predominantly Indians. At the moment 40% of the Ph.D. scientists working in the U.S. are foreign-born.

On June 26, 2012 the presidents of 90 leading American universities<sup>17</sup> sent a letter to the White House and Congress with urgent call for a bipartisan solution *to attract more* foreign students and **keep in** the U.S. foreign graduates with advanced science, technology, engineering and math (STEM) degrees educated at their universities.

This unprecedented action illustrates the scale of the crisis (of an «American» higher learning system), vital linkages with the world and even raising dependency of universities on foreign-born graduates (trained in other countries and university systems).

<sup>13</sup> The five immigrant Nobel Prize winners came from Britain, Canada, Australia, China, and India. See: Nowrasteh Alex. (2009). *Our Nobel Prize Winning Immigrants*. OpenMarket.org October 9, 2009. <[http://www.realclearmarkets.com/articles/2009/10/09/our\\_nobel\\_prize\\_winning\\_immigrants\\_97446.html](http://www.realclearmarkets.com/articles/2009/10/09/our_nobel_prize_winning_immigrants_97446.html)>. In spite of its name, the «Nobel Prizes» in economics in fact awarded annually by the Royal Bank of Sweden. In 2000s the monetary value of the Prize come close to \$1 million and more and more scholars involved in to competition with openly 'material' interests. See some explanations how Nobel economists reinforce their professional and political legitimacy in Lebaron Frédéric. (2006). «Nobel» *Economists as Public Intellectuals: The Circulation of Symbolic Capital*. International Journal of Contemporary Sociology, Volume 43, No.1, (April 2006), pp. 87-101.

<sup>14</sup> «The US has demonstrated that the best-quality scientific research is fostered when funding is awarded competitively, when plentiful, rigorously trained PhD students and post- docs are available cheaply, when substantial amounts of money are spent, when modern equipment is used, and when transfer of research to technological application is encouraged». Hicks Diana M. (2007). *Global Research Competition Affects Measured US Academic Output*. In *Science and the University*, edited by P. E. Stephan and R. G. Ehrenberg, pp.223–242. Madison: The University of Wisconsin Press, p. 242.

<sup>15</sup> The Partnership for a New American Economy new association of prominent intellectuals, local governments and public officials, leading representatives of business communities and etc. promote development of United States. Partnership formed in time of the Global Crisis started in 2008 and Co-Chaired by the New York City Mayor Michael R. Bloomberg and Mr. Rupert Murdoch, who also serves as Chief Executive Officer of the Partnership.

<sup>16</sup> *Immigrants Behind 76% of Patents from Top American Universities*. June 26, 2012. NYC.gov. <<http://www.mikebloomberg.com/index.cfm?objectid=29767068-C29C-7CA2-F879E8028EF01C25>>

<sup>17</sup> Original letter of universities presidents sent on June 26, 2012. The list includes the heads of major research universities – Stanford, Harvard, Yale, Cornell, California Institute of Technology, Georgia Institute of Technology, Carnegie Mellon, University of Chicago, University of Texas at Austin and more – represent 33 different states and Washington, D.C., a combined student population of more than 2.3 million and a combined endowment of more than \$180 billion. <<http://www.renewoureconomy.org/sites/all/themes/pnae/university-letter.pdf>>

University presidents call for attention of White House and Congress to significant role, playing by foreign-born faculty, researchers and students at American universities. They stressed the growing role of the research universities that responsible for 36 % of all research in the U.S., including 53 % of all basic research, and they help keep America at the forefront of the 21<sup>st</sup> century economy.

These data may hide real relationship in the knowledge production process, the review of patents from these universities found the following: **76 % of the patents had a foreign-born inventor**; 99 % of that patents were in STEM; foreign-born inventors played significant roles in the following fields: semiconductor device manufacturing – 87 %, information technology – 84 %, pulse or digital communications – 83 %, pharmaceutical drugs or drug compounds – 79 % and optics – 77 %. The inventors represent 88 different countries.<sup>18</sup>

Foreign-born STEM graduates of the U.S. universities are the most active job creators. In 2009, students on temporary visas were 45 % of all graduate students in engineering, math, computer science and physical sciences – earning 43 % of all master's degrees and 52 % of all kind of PhDs.

«New American» Fortune 500 report<sup>19</sup> (June 2012) shows that more than 40% of the 2010 Fortune 500 companies were founded by immigrants or their children. **Seven out of ten of most valuable brands in the world** come from American companies founded by immigrants or children of immigrants.<sup>20</sup>

American universities work as hubs for cultural absorption of skilled immigrants and processing external human resources – foreigners. With increasing (financial) wealth and prestige of America's leading universities the U.S. is constituted as a premier destination for the «mobile» student and professor. The mobility of skilled people is essential element of Open Door policy.

The re-productive centrality and advantages of American universities derive from reproducing preponderance of crucial material resources – as linkages and access to the pool of the world's most promising graduate students.

The United States remains the destination for the **largest number of foreign students worldwide**, although its share of foreign students worldwide decreased from 24% in 2000 to 19% in 2008.<sup>21</sup> As showed in Table 2 the proportion of international students captured by the U.S. university system has been dropped since themed of 1980s.

**TABLE 2**

**Millions of international students worldwide and in the United States, and U.S. share, 1975–2007**

Academic year	World	United States	(%)
1974–1975	0.6	0.15	25.00
1979–1980	0.8	0.29	36.25
1984–1985	0.9	0.34	37.80
1989–1990	1.2	0.39	32.50

However the global financial crisis dramatically increase the demand for higher education and degrees from U.S. universities in particular. Several governmental measures have been undertaken to attract more students.

**The academic year 2010/2011 represented historically highest number of international students in the U.S. universities.**

The number of international students enrolled at the

<sup>18</sup> **Patent Pending: How Immigrants Are Reinventing The American Economy.** Report of the Partnership for a New American Economy. 2012. <<http://www.renewoureconomy.org/sites/all/themes/pnae/patent-pending.pdf>> Share of graduates among migrants to USA: India 80%; Philippines 73 %; Nigeria 83%; Egypt 78%; Sudan 63%; Tunisia 64%; Bangladesh 62%; Share if Master's Degree holders and above among the natives of the USA is 9%. 70% of cross-border students study in USA, UK and Australia.

<sup>19</sup>The “New American” Fortune 500 report. 2011. <<http://www.renewoureconomy.org/sites/all/themes/pnae/img/new-american-fortune-500-june-2011.pdf>>

<sup>20</sup> The “New American” Fortune 500 report. 2011. <<http://www.renewoureconomy.org/sites/all/themes/pnae/img/new-american-fortune-500-june-2011.pdf>>

<sup>21</sup> Between the 1960s and the 1990s the U.S. share of the world foreign student population has balanced around one-third. Over 77% of all international students study in OECD countries.

1994–1995	1.3	0.45	34.60
1999–2000	1.9	0.51	26.80
2006–2007	2.9	0.58	20.00

Sources: For millions of international students worldwide, OECD (2008), Education at a glance: OECD indicators, box C31; for international students in the United States, Institute of International Education, figure 1B International Students and US. Higher Educational Enrollment Trends, <http://opendoors.iienetwork.org/?p-131533>.

U.S. universities increased by 5% to 723,277 (this is about 6% of students enrolled outside of their own country, but the percentage of graduates is much higher).<sup>22</sup>

The increased number of university graduates overseas and of international students who return to their homeland will increase competition for U.S. workers. In that conditions multinational corporations will be more likely to locate overseas R&D and other activities.

So, between 1994 and 2004, R&D employment increased by 94 % in the foreign affiliates of U.S. multinationals, while employment in the parent firm increased by 39 %.<sup>23</sup>

American strategists afraid that the growth of number of graduates abroad will eventually broke **the North-South model of trade** in which the advanced North does the R&D that produces innovative products and the developing South produces products based on low-wage labor.

With more highly educated workers, developing countries should be able to increase their rate of innovation and their rate of imitation. The prices of U.S. exports in high-tech and other university-graduate-intensive sectors should decline, with adverse consequences for the workers in those sectors and for workers with similar skills elsewhere. And as a consequence, this competition will squeeze U.S. earnings and job opportunities.<sup>24</sup>

Foreign students in Science and Engineering (S&E) graduate programs increased from 22% to 25% from 1993 to 2006. At graduate level **the concentration of foreign enrollment** was highest in engineering – 45%, computer sciences – 44%, physical sciences – 40%, mathematics – 36%, and economics – 52%.

About 60% of all foreign graduate students in the United States in 2010 were enrolled in S&E fields, compared with 32% at the undergraduate level; they earned 57% of all engineering doctorates, 54% of all computer science degrees, and 51% of physics doctoral degrees.

Among 263 National Universities<sup>25</sup> that host international students the highest number are at the leading elite universities, such as University of Southern California, University of Illinois, New York University, Purdue University, Columbia University, University of California–Los Angeles, University of Michigan–Ann Arbor, and Harvard University etc.

<sup>22</sup> The international students contribute more than \$21 billion to the U.S. economy. The top 10 most popular fields of study for *international students* in the U.S. in 2009/10 were: Business and Management – 22 %, Engineering – 19 %, Mathematics and Computer Science – 9 %, Physical and Life Sciences – 9 %, Social Sciences – 9 %, Fine & Applied Arts – 5 %, Health Professions – 5 %, Intensive English Language – 5 % etc.

Sources: The Open Doors report of the Institute of International Education and the U.S. Department of State's Bureau of Educational and Cultural Affairs, U.S. Patent Office for patent applications and Statistical Abstract of the United States for total U.S. labour force. <<http://www.nsf.gov/statistics/seind10/append/c2/at02-31.xls>> and <<http://www.nsf.gov/statistics/seind12/c2/c2h.htm>>.

<sup>23</sup> In 1994, R&D employment was 92,400 in majority-owned foreign affiliates of U.S. multinational corporations (MNCs) and 591,200 in U.S. parent firm ([http://www.bea.gov/scb/account\\_articles/international/1296iid/table17.htm](http://www.bea.gov/scb/account_articles/international/1296iid/table17.htm)). In 2004, it was 179,300 in majority owned foreign affiliates and 818,7000 in parent firm – Yorgason Daniel. (2007). Research and Development Activities of U.S. Multinational companies. Survey of Current Business (March), pp. 22–39, tables 1 and 3.

<sup>24</sup> Freeman Richard B. (2010). *What Does Global Expansion of Higher Education Mean for the United States?* pp. 374-405 in Clotfelter Charles T. (ed.). (2010). *American Universities in a Global Market*. A National Bureau of Economic Research Conference Report. The University of Chicago Press. Chicago and London.

<sup>25</sup> National Universities offer undergraduate and graduate degrees – master's and doctorates.

The location of international students and the production of doctorates at the «American University System» are highly concentrated. It is an exclusive club – there are just a few places where worldviews and true knowledge can be produced. See Table 3 illustrating this concentration.

**TABLE 3**

**U.S. doctorate production by type of institution in 2000**

	No. of Institutions	No. of PhDs	% Total PhDs
All	406	41,364	100
Research University	89	27,168	66
American Association of Universities	61	21,748	53
Largest	50	21,228	51
Largest	25	13,351	32
Largest	10	6,442	15

Source: Digest of Educational Statistics, 2001. From National Center of Educational Statistics <<http://nces.ed.gov/programs/digest/>>

The group of universities-leaders with greatest international enrollment cohort of students of graduate level – plays the role of the Leading private global doctorates production centers, is presented in a Table 4 below.

**TABLE 4**

**Universities with greatest international enrollment cohort (graduate level)**

Institution	City	State	Foreign student In %	Total Enrolled Students
Princeton University	Princeton	New Jersey	18	7,813
Harvard University	Cambridge	Massachusetts	16	27,392
Yale University	New Haven	Connecticut	15	11,875
California Institute of Technology	Pasadena	California	25	2,231
Massachusetts Institute of Technology	Cambridge	Massachusetts	25	10,894

Source: as cited earlier - The Open Doors report etc.

### **Doctorates production – is a high tech line of the American (Global) University System**

The absolute number of foreign doctoral students has exceeded that of Americans since the late 1970s in engineering, since the late 1980s in economics, and since the mid-1990s in physical sciences.

What do this inflow of foreign graduate students mean for the research productivity?

It has become a truism that Ph.D. training is complementary with the production of research. But how deeply dependent the U.S. universities become on the ready availability of foreigners to work in their labs and collaborate on research projects? As showed last studies foreign-born graduate students and post docs are extremely important. They serve as authors in over 85 % of all articles and as first authors in three- quarters of papers. Over half of the articles had a foreign student or post doc as a coauthor. Foreign graduate students and post docs are not simply important in staffing the labs of U.S. universities; they actually **play leading roles in university research projects**.

Foreign-born S&E doctorate holders contribute substantially to academic Research and Development in the United States. The U.S. universities and colleges employ unknown but probably large number of foreign-born S&E doctorate holders with doctorates from foreign universities.<sup>26</sup>

<sup>26</sup> «Science and Engineering Indicators 2008» estimated that about 36% of foreign-born S&E doctorate holders had foreign-earned doctorates.

International graduate students significantly impact on all kind of university's activities, on knowledge production and future patent applications, as well as on future patent awarded to university and non-university institutions.

Between 1970 and 2005, the number of the U.S. citizens who obtained doctoral degrees declined by 23% in engineering, by 44% in physical sciences, and by 50% in mathematics. In engineering, the foreign born share of doctoral students has been over 50% since the late 1970s, since the late 1980s in economics, and since the mid-1990s in physical sciences. In 2004 55% of Ph.D. students in engineering in the U.S. were foreign born. Now in a number of highly ranked U.S. engineering schools international doctoral students accounts for nearly 80%. There are higher proportion of Central and Eastern European U.S. doctorate recipients – 88% than of Western European doctorate students – 73% earned their doctorates in S&E fields, particularly in mathematics and physical sciences.

The proportion of foreign-born engineers among assistant professors younger than 35 years has increased from 10% in 1972 to 50%-55% in 1983-1985, illustrating a dramatic increase on US dependence on foreign-born students in the U.S. university system.<sup>27</sup>

At the same time there is absolute asymmetry between flows of U.S. produced doctorates in S&E and in Economics! The most important type of U.S. universities productive hegemony possess in «economic science». American economists dominating all forms of international recognition and its universities economics departments are worldwide major producers of top economists. Up to the moment the United States-to-Europe ratio in Nobel laureates is 2.9; in Econometric Society Fellows, 3.2; in entries in Who's Who in Economics, 4.8; and in economic publications, 1.9 to 8.3.<sup>28</sup>

The U.S. research output in economics is about 75% of world output. The attractiveness plays the role. Most of top economists strive to obtain their PhD's in the U.S. For, among 585 economists listed in Who's Who in Economics who received their PhDs at American universities, 26 percent came from abroad.<sup>29</sup> Evidently a brain drain is at work. The return rate to home countries after graduation in the U.S. even for Western Europe is only 40%. Historically in production of Ph.D. in economics the U.S. play the role of «net exporter». **The worldwide U.S. export of Economics** should be considered as core element of world-reproduction and keeping in forth its global liberal order.

**The Rule is: the most qualified engineers must be hosted in the U.S.**

In order to assess the asymmetrical dynamic of relations within 'global university system' we need to look at least on such formal index as the rate of return of students after graduation at the U.S. universities. This is very complex issue, but in fact we should point that the lion share of graduates from all represented countries **never return**.

Almost 60% of foreign-born engineering doctorate holders are likely to become part of the US engineering labor force within a few years after graduating. The other 40% of foreign-born engineering PhDs mostly likely find employment working for Multinational Corporations outside of

---

<sup>27</sup> In 1982, foreign-born engineers constituted about 3.6% of all engineers employed in the United States, 13.9% of which were naturalized; and foreign-born PhDs in Engineering constituted 15% and 20% were naturalized.

<sup>28</sup> Dreze J. H. and F. Estevan. (2007). Research and Higher Education in Economics: Can we Deliver the Lisbon Objectives? Journal of the European Economic Association, No. 5 (April/ May), table 1, p.273. For Europe, the authors used the EU fifteen plus Norway, whose population in 2000 was 382,283, compared to the United States' pp.282, 339 (see [www.demographia.com/db-eu-pop.htm](http://www.demographia.com/db-eu-pop.htm)). Statistical Abstract of the United States 2006, table 1314.

<sup>29</sup> Dreze J. H. and F. Estevan. (2007). Research and Higher Education in Economics: Can we Deliver the Lisbon Objectives? Journal of the European Economic Association, No. 5 (April/ May), table 3a, pp.273–274, (pp. 271–304).

the U.S.<sup>30</sup> About 47 % of the foreign students who earned doctorates in 1990 and 1991 were working in the U.S. in 1995.

**TABLE 5**  
**Doctorate degrees conferred in science and engineering**  
**by top producing public and private universities**

	1966 – 1975		1996 – 2005	
	Foreign	Total	Foreign	Total
<b>Private universities</b>				
Stanford University	744	3,004	1,639	4,069
MIT	958	3,528	1,530	4,297
Cornell University	941	2,881	1,485	3,149
University of Southern California	256	960	1,298	1,910
Columbia University	522	1,769	1,175	2,075
Johns Hopkins University	301	1,280	911	2,702
Harvard University	409	2,102	854	2,796
University of Pennsylvania	542	1,767	849	2,041
Princeton University	364	1,363	824	1,610
Northwestern University	364	1,614	798	1,997
<b>Public universities</b>				
Texas A&M University	338	1,548	2,018	3,455
Ohio State University	561	2,505	1,945	3,364
Purdue University	718	3,294	1,944	3,410
University of Illinois	1,136	4,037	1,933	4,068
University of Texas (Austin)	377	1,994	1,786	3,519
University of Michigan (Ann Arbor)	629	2,854	1,720	4,042
University of Wisconsin (Madison)	1,064	3,924	1,709	4,087
University of Minnesota (Twin Cities)	814	2,479	1,690	3,614
University of California (Berkeley)	1,452	4,500	1,608	4,783
Pennsylvania State University	381	1,838	1,590	3,237

Source: NSF, Survey of Earned Doctorates microdata.

**TABLE 6**  
**Foreign born students who earned Ph.D. in S&E in U.S. universities**

	Until 1990	1992-1996	1996-1999	2004-2007
planned to locate in the U.S. after graduation	~ 50%	68 %	71 %	77 %
had firm offers to do so	~ 33 %	~ 44 %	45%	51 %
Recipients from China	42 %	57 %	-	90 %
Recipients from India	-	-	-	89 %

Foreign-born S&E doctorate holders constitute a higher percentage of researchers than of all academically employed S&E doctorate holders, they are more heavily concentrated in computer sciences, mathematics, and engineering than in other fields.

In engineering foreign-born faculty now accounts for over 50%.

See the proportion of foreign-born among academic researchers and faculties in Table 7.

**TABLE 7**  
**Foreign born U.S. doctorate holders and faculties (in %)**

	2006 in math & engineering	2006 in IT	2006	1973	1999
Represent all academic research	39-48	> 50	27		
Full-time faculty researchers	39-48	> 50	24		
Full-time faculty	39-48	> 50	20	11.7	20.4
Full-time engineering faculty				18.6	34.7
<b>Working in the U.S.</b>					
Physicists			45		
Chemical & materials engineering			80		

<sup>30</sup> Foreign and Foreign-Born Engineers in the United States: Infusing Talent, Raising Issues. Office of Scientific and Engineering Personnel, 1988.

The graduation serves as an exterritorial admission ticket into «global economy» and those who once allowed and processes though would never come back – either staying within U.S. or working for transnational corporations, international institutions, foreign banks or at local universities but realizing acquired culture – learned worldview, knowledge and moral imperatives.

Among the number of societal production factors working here is the mechanism of legitimization, by which a degree obtained at the U.S. universities, serves as a symbol of linkage to the advanced global society and economy.

The connections to the United States (or West) constitute a form of symbolic capital, which graduates use in their attempt to establish legitimacy within their country's activity.

Some data on dynamic of proportion of Chinese, Indian, Thais and African, Mexican and Brazilian, and European doctorates returned to home after graduation in the U.S. see in Table 8.

**TABLE 8**  
**The proportion of doctoral students returned to home country after graduation in the U.S. in %**

	1980s	2000s
Chinese doctoral graduates	25.9	7.4
Indian doctoral graduates	13.1	10.3
Thais		84
Africans		39.5
Mexicans and Brazilians		60
Europeans	36.9	25.7

### **The Power of Human Capital Imperative**

*«There is no stand-alone liberal peace. American power is what keeps the world – or parts of it – from being closed to the United States ideologically and economically».*<sup>31</sup>

The «global university system» works as key super-structural element on formation of the state of openness, pipelines and hubs for a global brain drain race and circulations – that is going on between the world's industrial and technological leaders and marginalized, in term of capitalization of world periphery. The obvious objective of this neo-liberal Open Door real-politic is to snap up the best and the brightest immigrants from poor countries and periphery of world capitalist system.

According to the research report called «U.S. Recession and Repression Are Only in Our Minds» issued by J.P. Morgan, the stock of the American human capital is **over \$750 trillion**.<sup>32</sup> This estimation is close to the sum of global financial speculative market and much greater than the roughly \$70 trillion of physical and financial assets owned by American households.<sup>33</sup> All these estimations demonstrate the further intensification of expansion of Wall Street culture and practices onto fabric of world societal reproduction.

In the shadow of the global crisis the escalating global race for talent, through development and expansion of new intelligent instruments for control and global regulation of universities and entire higher education systems, has become strategic imperative at the global agenda of key international players.

The American Enterprise Institute published (January, 2012) public policy strategic assessment and report with the wonderful title «**The Human Capital Imperative: Bringing more Minds to America**».

<sup>31</sup> Layne Christopher.(2006). *The Peace of Illusions. American Grand Strategy from 1940 to the Present*. Ithaca London: Cornell University Press, p. 132.

<sup>32</sup> Michael S. Christian. (2010). *Human Capital Accounting in the United States, 1994-2006*. Web resource: <[http://www.bea.gov/scb/pdf/2010/06%20June/0610\\_christian.pdf](http://www.bea.gov/scb/pdf/2010/06%20June/0610_christian.pdf)>.

<sup>33</sup> Feroli Michael. (2011). *U.S. Recession and Repression Are Only in Our Minds*. Global Data Watch. J.P. Morgan Chase, 30 September, 2011. Web resource. <[https://mm.jpmorgan.com/stp/t/c.do?i=339CCFF3&u=a\\_p\\*d\\_687313.pdf\\*h\\_-1evfkon](https://mm.jpmorgan.com/stp/t/c.do?i=339CCFF3&u=a_p*d_687313.pdf*h_-1evfkon)>.

The author of the report Nick Schulz explains this expansionary stance – «As important as human capital is to economic success, it is not evenly distributed around the world. There is ample human capital already in the United States, but there are also enormous stocks of human capital – and potential capital – found overseas».<sup>34</sup>

University system is part and parcel of the expansion and reproduction of this knowledge-technology-culture-socio-demographic-cognitive and biotic asymmetrical redistribution. And Mr. Schulz assigned the role to American universities – it must be world's leading universities – to attract the best and incorporate them in self-interested manner: «America should be home for the world's leading universities which produce the U.S. intangible assets». Shaping global higher education development and university's policy is a pillar of U.S. security policy.

Universities and professors are just happy to participate in that Grand Strategy realization – which will be heavily remunerated. But the issue is that they naturally even constitute themselves through co-production of these ego-cultural and asymmetric relations. Colleges and universities contribute to socio-economic inequality on a global scale? With global university system play the role of engine in stratification of nations and societies?<sup>35</sup>

However, the results of continuation these reproductive practices of are well known and just devastating – they systematically reproduce gaps and asymmetry. And brain drain, in particular, permanently undermines any hopes for decreasing the technological gap and development not only «periphery countries», but those surrounding zone of capitalist's core as well. The ongoing exodus of most talented and educated citizens prevents development.

In that context the a creation of new university system and knowledge infrastructure should be considered as a step toward development of an opportunity for a new type of co-operative and co-development practices in the building of human culture, «global society» and «global economy».

Before consideration of these issues we need to review fundamental linkages of institutional development of university with Wall Street – through university endowments, and **relations of economization and institutionalization of economics as profession** globally.

### 3. University's Endowments Formative Role

From beneficence to the Intelligent Core of (Global) «Shadow Banking».<sup>36</sup>

The university's endowment is one of the most complex and intriguing institutional creatures developed by Western Societies.

As a special institution it counts a centuries-long history. Basic function was to provide a source of secure income from donated and gifted property. The key mission was to serve as a vehicle for intergenerational equity transfer. The university must use endowment to provide the same level of services to tomorrow's community as it provides to today's.<sup>37</sup>

<sup>34</sup> Schulz Nick. (2012). *The Human Capital Imperative: Bringing more Minds to America*. National Chamber Foundation January 31, 2012. [http://www.aei.org/files/2012/01/31/-the-human-capital-imperative-bringing-more-minds-to-america\\_090338514637.pdf](http://www.aei.org/files/2012/01/31/-the-human-capital-imperative-bringing-more-minds-to-america_090338514637.pdf)

<sup>35</sup> Since 2000 in order attract best talent some leading colleges and universities in the U.S. elaborated full financial aid to international undergraduate students; these institutions include: MIT, Harvard, Princeton, Dartmouth, Williams, and Middlebury. See <http://www.edupass.org/finaid/undergraduate.phtml> for a list of universities that offer significant financial aid (both need- based and merit, but not athletic) to international students.

<sup>36</sup> We borrow this term 'shadow banking' brightly expressed in comprehensive study of endowments practices conducted by the Center for Social Philanthropy at Tellus Institute. This study investigated practices of some of U.S. most prestige endowed private colleges and universities: Boston College, Boston University, Brandeis University, Dartmouth College, Harvard University and the Massachusetts Institute of Technology. See: Humphreys Joshua (ed.). (2010). *Educational Endowments and the Financial Crisis: Social Costs and Systemic Risks in the Shadow Banking System*. A Study of Six New England Schools. Center for Social Philanthropy. Tellus Institute. Boston, Massachusetts. – 103 p.



It may be considered as a principle of *sustainable use* and responsibility for keeping **infrastructure for higher learning** (that reproduced through and by resources generating by endowment) in a relevant shape by using it in such a way that would not prejudice the possibilities of future generation. Over time the endowment growth itself became one of the core university's missions.

In the whole landscape of American higher education endowments of leading universities has the most totemic and almost religious meaning. They perceived as key symbols of status and prestige. It is a tool to demonstrate the value, significance and weight of particular university, recognized for contribution to corporate world (Wall Street), to individuals and to society at large. The value of endowment represent not just financial wealth, but symbolic achievement similar to good libraries, art museums, campus architecture, faculty, and the prominence of universities alumni.<sup>38</sup>

This unique institutional role and capacities of endowment are not just a result of philanthropists and government's efforts, but the product of tight **strategic collaboration** between Wall Street financiers, neo-liberal academic economists, law professors and university's endowment managers. Endowments serve as mechanisms of direct and multifunctional linkages of universities with corporate world and «global economy». Through introduction to Wall Street mentality and practices universities had seen to advance themselves to the dynamic of 'real market' and even to the «heart of globalizing economy», as it is presenting by modern «science of economics».

Since its institutionalization as a part of university structures endowments received **tax-exempt status**. For around three centuries major source of their growth was new gifts and fundraising, endowments invested in most secure, transparent and liquid securities. There were no significant changes in endowment status and management.<sup>39</sup>

Formative influence of Wall Street became apparent in 1920s with the growth of activity of financial institutions around New York Stock Exchange. It followed gradual integration with financial markets in 1950s and 1960s. Strategic turn to full absorption was made with neo-liberal financialization at the beginning of 1970s. Between 1972 and first decade of XXI<sup>st</sup> century **university endowment as an institution deeply transformed** from risk-averse, rule-driven and volunteer investor into high profile investment structure overseen by highly paid professional investment managers and with increasingly complex and risky portfolios.

In last 25 years university endowments fully converted into one of the basic elements of (global) financial-speculative system.

The most expressive evidence of integration of Wall Street and Endowment's Practices is parallel fluctuations and unprecedented losses, experienced by university endowments at the eve of Global Recession of XXI<sup>st</sup> century in 2008-2009.<sup>40</sup> In this regard see following Table 9.<sup>41</sup>

<sup>37</sup> As stressed by James Tobin: "[The university trustees'] task is to preserve equity among generations. The trustees of an endowed university . . . assume the institution to be immortal. They want to know, therefore, the rate of consumption from endowment which can be sustained indefinitely. . . . Consuming endowment income so defined means in principle that the existing endowment can continue to support the same set of activities that it is now supporting." Tobin James. (1974). *What Is Permanent Endowment Income?* American Economic Review. Volume 64, p. 427.

<sup>38</sup> Conti-Brown Peter. (2011). *Scarcity Amidst Wealth: The Law, Finance, and Culture of Elite University Endowments in Financial Crisis*. Stanford Law Review, Volume 63, March 2011, pp. 699-748.

<sup>39</sup> See Fred Rogers. (2005). *Sources of Endowment Growth at Colleges and Universities*. Commonfund Institute, April 2005.

<sup>40</sup> It is unknown data, but by some estimations Harvard's Endowment debt because of greatest losses in 2008/2009 accounted for about \$6 billion, which means that Harvard must pay \$517 million a year until 2038 to pay it off.

<sup>41</sup> Source: *Study of Endowments 2012*. National Association of College and University Business Officers and Commonfund Institute.

**TABLE 9**

**Historically Greatest Decline in U.S. Colleges and Universities Endowments Value**  
(biggest losses in dollars)

Rank of size of loss		2009 endowment value in \$	loss in endowment in \$	% loss in endowment
1	Harvard University	25,662,055,000	10,894,229,000	-29.8
2	Yale University	16,327,000,000	6,543,000,000	-28.6
3	Stanford University	12,619,094,000	4,595,279,000	-26.7
4	University of Texas System	12,163,049,000	4,008,135,000	-24.8
5	Princeton University	12,614,313,000	3,735,016,000	-22.8
6	Northwestern University	5,445,260,000	1,798,688,000	-24.8
7	Duke University	4,440,745,000	1,682,998,000	-27.5
8	The Texas A&M University System and Foundation	5,083,754,177	1,575,598,270	-23.7
9	University of Michigan	6,000,827,000	1,571,075,000	-20.7
10	University of Chicago	5,094,087,000	1,538,224,000	23.2

**TABLE 9**  
(extension)

**Historically Greatest Decline in U.S. Colleges and Universities Endowments Value**  
(biggest losses in percent)

Rank of % loss		2009 endowment value in \$	% loss in endowment*
1	Jacksonville University	23,268,585	-59.7
2	Southern Connecticut State University Foundation	7,050,102	-42.8
3	Bethany Lutheran College	28,729,702	-37.6
4	Roger Williams University	62,747,000	-36.8
5	Alverno College	16,699,740	-35.6
6	Haverford College	336,086,000	-35.5
7	Ohio Northern University	112,948,096	-34.9
8	Lipscomb University	48,021,247	-34.1
9	Mennonite Education Agency Investment Fund LLC	104,365,164	-34.0
10	Chapman University	134,676,783	-33.3

### **Endowments and Wall Street «Imageries».**

Only recently in the context of global crisis university's endowments began to receive serious attention as institutions in their own right. But scholars and financial researchers mainly concentrated on investigation of sources and schemes of extremely successful endowment's practice. Most of studies focused almost on «portfolio-level risk and return» and do not look at broader environment and its strategic relations and institutional linkages.

But the most fundamental and important question now is to expose **how** endowment assets and practices are **intertwined** with flows of funds across the global economy and how it connect Wall Street with university's strategic institutional development.

Wall Street mentality and influence of its institutional culture fundamentally transformed endowment strategies, stewardship and university's finances in general. The impact of college endowments on financial markets extends far beyond the campuses as well. Given the **scale of capital** under endowment's control and its **academic credibility**, their high-risk investment strategies now play significant formative role throughout all financial industry. Through engaging in speculative trading tactics, using exotic derivatives, deploying leverage, and investing in illiquid asset classes, hedge funds and private equity, **endowments played decisive role** in increasing systemic risks in the (global) capital markets.

Since the time of collapse of fUSSR in 1990 endowments sharply broadened areas of activity in international and emerging markets, includes Eastern Europe and Middle Asia, Russia,

China and India. Globalization of endowment's practices increases investment and operational risks.

Historically endowment funds have long been invested in a variety of instruments. Basic culture guidelines for managing endowments known as «prudent man rule» established by Supreme Court of Massachusetts at «Harvard College v. Amory» case in 1830. The court stated that endowment's trustees should behave as «how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested».<sup>42</sup> The «prudent man rule» worked over the XIXth century – endowments invested in treasury notes, secured bonds, in real estate and mortgages. However in 1920s high-yielding corporate stock become so attractive that, despite the Wall Street crash of 1929 and the Great Depression that followed, leading endowments such as Harvard and Princeton expanded their corporate stock holdings. So, before World War II up to 50% of endowment's portfolios allocated to equities.<sup>43</sup>

The very decisive and formative year in investment history was 1969. As part of neo-liberal turn at 1970s and with further expansion of financialization of the world, a group of Wall Street financiers, lawyers, economics academics and leading university's endowment trustees via support of Ford Foundation initiated the abandonment of «prudent man rule» and promoted more aggressive and dynamic approach to the management of endowment funds.

In 1969 the Ford Foundation created Advisory Committee on Endowment Management,<sup>44</sup> which prepared so-called «Barker Report» and a series of publications advocated new schemes of management of endowed funds. First report discredited the «prudent man rule» as not well applicable to endowments and call to employ as more adequate law here the corporate one. The «Barker Report» proposed to shift investment objectives *from securing income to maximizing* long-term total return. Reports summoned to cast aside risk-averse fears of **short-term volatility** and to **embrace growth**. Because of high credibility of commissioners represented Wall Street and Academia these reports laid out conceptual basis for a new paradigm of **higher-risk, higher-return** investment management strategies for nonprofit endowments. University administrations also encouraged transfer investment authority from finance officers on campuses to external managers, who could use investment opportunities more actively.

The impact of sponsored by Ford Foundation reports was remarkable. It «spawned the development of new institutions and legal norms embodying total-return maximization».<sup>45</sup>

These actions started an expansion of strategic relations and infrastructure for linkages between university world and practices of financial industry of Wall Street. This resulted in creation of Endowment Model of Investing. So, National Association for College and University Business

---

<sup>42</sup> Cited in Humphreys Joshua (ed.). (2010). *Educational Endowments and the Financial Crisis: Social Costs and Systemic Risks in the Shadow Banking System. A Study of Six New England Schools*. Center for Social Philanthropy Tellus Institute. Boston, Massachusetts, p.8.

<sup>43</sup> Ibid, pp. 17-18.

<sup>44</sup> Key members were Robert R. Barker – commission chairman, a Wall Street executive worked at J. P. Morgan & Company in 1960s and later became an leading expert on educational endowments and serves as president of Harvard University's board of overseers in 1988 and 1989; Peter Vermilye, treasurer of State Street Investment Corporation who later had served as chair of the Boston University's investment committee for three decades; J. Peter Williamson, a professor of finance at Dartmouth College; John F. Meck, the vice president and chairman of Dartmouth's Investment Committee; William L. Cary, Columbia University law professor and former chairman of the Securities and Exchange Commission under Presidents Kennedy and Johnson, and law professor and attorney Craig B. Bright.

<sup>45</sup> Humphreys Joshua (ed.). (2010). *Educational Endowments and the Financial Crisis: Social Costs and Systemic Risks in the Shadow Banking System. A Study of Six New England Schools*. Center for Social Philanthropy Tellus Institute. Boston, Massachusetts, p. 19.

Officers, Common Fund for Nonprofit Organizations established, and the 1972 Uniform Management of Institutional Funds Act adopted.

An official Uniform Management of Institutional Funds Act opened the door to **riskier investment strategies**.

Among the most important factor played the key role here was idealized vision of ‘Wall-Street capitalism» as it widely presented as an advanced model of socio-economic organization in the extremely solidified in 1950s-1960s «science of economics», as well as in the «scientific theory of finance» at the core of it. As stated by one of the proponents, «... the Stock Exchange is not the appendix or gall bladder of the body economic, but its very heart».<sup>46</sup> We will return to the issue of economic science institutionalization interplayed with Wall Street practices and universities more broadly in the following sections of this report later.

The next principle source of conceptual framework for the development of modern Endowment Model of Investing came from famous Modern Portfolio Theory (MPT). Key proposition of MPT was that investment risk and return are always and highly correlated. So, **greater risk brings higher returns**.

MPT provides a framework for managing risk through *diversification* – which means investing in a diverse array of classes of assets with assumption that different «asset class» possess its own and very specific «risk/return profile». The Endowment Model of Investing differentiates asset classes as traditional and nontraditional or alternative. Different asset classes differently exposed to risks and diversely located throughout markets. With globalization endowment started to invest in international markets and increasingly in high-risk emerging markets. The basic belief was that because of fundamentally long-term investment horizon, in pursuit of higher returns endowments could «weather short-term volatility» and more openly expose for risks. To manage risks help came from complex derivative securities. Diversified investors consider derivatives as a tool of control of portfolio risk by hedging strategies.

The determinant role in formation of intellectual background and pioneering practices of Endowment Model of Investing played by legendary professor David Swensen.<sup>47</sup> As a head of Yale Investments Office he redesigned endowment strategy to radically diversify allocation across asset classes, including increasing exposure to alternative **more riskier investments**.

The «Yale model» pioneered in implementation of MPT, the diversified asset allocation has become the hallmark of invented by Dr. Swensen the Endowment Model of Investing. Under his leadership Yale endowment continue its tremendous financial speculation success. So, the Yale Endowment after collapse in 2008/2009 in fiscal 2011 provided \$987 million, or 36 %, of the University’s \$2.734 billion operating income (see Table 10). We can see that even in direct sense endowment is feeding Yale in a scale of up to 46% of its total revenue. It also showed the increase of risky assets in endowment portfolio.

TABLE 10

The Yale University Endowment Highlights					
Fiscal Year	2011	2010	2009	2008	2007
Market Value (in millions)	\$19,374.4	\$16,652.1	\$16,326.6	\$22,869.7	\$22,530.2
Return	21.9%	8.9%	-24.6%	4.5%	28.0%
Spending (in millions)	\$ 986.8	\$ 1,108.4	\$ 1,175.2	\$ 849.9	\$ 684.0
Operating Budget Revenues	\$ 2,734.2	\$ 2,681.3	\$ 2,559.8	\$ 2,280.2	\$ 2,075.0

<sup>46</sup> Dore Ronald. (1987). *Taking Japan Seriously*. Stanford CA: Stanford University Press, p. 118.

<sup>47</sup> He received his Ph.D. in economics from Yale University under James Tobin’s mentorship and explicitly applied MPT to endowment management since he became a head of Yale Investments Office in 1985 at age 31. Before returning to Yale D.Swensen actively participated in developing new Wall Street financial instruments derivatives, currency exchange-rate swaps (working six years as a senior vice-president at legendary Lehman Brothers Holdings Inc. where he specializing in swap activities, and as an associate in Salomon Brothers where he focused on developing new financial technologies). Dr. Swensen engineered historically first swap transaction. He used to be a member of U.S. President Economic Recovery Advisory Board in 2009-2011.

(in millions)					
Endowment Percentage in Total University revenue	36.1%	41.3%	45.9%	37.3%	33.0%
Asset Allocation – types of assets by class (as of June 30)					
Absolute Return	17.5%	21.0%	24.3%	25.1%	23.3%
Domestic Equity	6.7	7.0	7.5	10.1	11.0
Fixed Income	3.9	4.0	4.0	4.0	4.0
Foreign Equity	9.0	9.9	9.8	15.2	14.1
Private Equity	35.1	30.3	24.3	20.2	18.7
Real Assets	28.9	27.5	32.0	29.3	27.1
Cash	-1.1	0.4	-1.9	-3.9	1.9

Source: The Yale University Endowment Highlights. Report of Yale University Investment Office. 2011. <[http://www.yale.edu/investments/Endowment\\_Update.pdf](http://www.yale.edu/investments/Endowment_Update.pdf)>

As Dr. Swensen describes in his 2011 report, Yale's portfolio is structured using a combination of academic theory and informed market judgment. He strongly backed his activity by academic authority and «science». As he explains the theoretical framework relies on mean variance analysis, an approach developed by Nobel laureates James Tobin and Harry Markowitz, both of whom conducted work on this important portfolio management tool at Yale's Cowles Foundation.

As soon as American university deeply involved into world-production and implementation of market-oriented world order to it more and more treated itself in a light of economic imageries. And produces world as for America's and as well for own «economic» advantages. In that sense university behave a true economic agent maximizing the expected utility of its activities. It seen as utility maximizing and profit-maximizing firm.<sup>48</sup> There are multidimensional socio-historical and material relations of university and the rest of the world. And most of them not well reflected and articulated. For example, an American university regularly receives donations from alums. And this donations and gift-giving usually quite sensitive to the performance of Wall Street, «when the market does well, gifts are high; when it does poorly, gifts are low». That means that through donation and gift-giving process, the university posses «shadow» investment linkages to the stock market. «The prospect of future cash flows to the university from particular type of industry or sector creates a shadow investment in those industries and sectors».<sup>49</sup>

Using statistical techniques to combine expected returns, variances, and co-variances of investment assets, Yale employs mean-variance analysis to estimate expected risk and return profiles of various asset allocation alternatives and to test sensitivity of results to changes in input assumptions.

Because investment management involves as much art as science, qualitative considerations play an extremely important role in portfolio decisions. The definition of an asset class is quite subjective, requiring precise distinctions where none exist. Returns and correlations are difficult to forecast.

Over the past two decades, Yale reduced dramatically the Endowment's dependence on domestic marketable securities by reallocating assets to nontraditional asset classes. In 1991, 53 % of the Endowment was committed to U.S. stocks, bonds, and cash. Today, only 11 % allocated to domestic marketable securities, while assets of foreign equity, natural resources, private equity, absolute return strategies, and real estate dominate the Yale Endowment, representing 89 % of the target portfolio. The heavy allocation to nontraditional asset classes stems from their return potential and diversifying power. Today's actual and target portfolios have significantly higher expected returns than the 1991 portfolio. Alternative assets, by their very nature, tend to be less

<sup>48</sup> Merton Robert C. (1993). Optimal Investment Strategies for University Endowment Funds. In Clotfelter Charles T. and Michael Rothschild. (eds.). Studies of Supply and Demand in Higher Education. University of Chicago Press, 1993, pp. 211-242.

<sup>49</sup> Merton Robert C. (1993). Optimal Investment Strategies for University Endowment Funds. In Clotfelter Charles T. and Michael Rothschild. (eds.). Studies of Supply and Demand in Higher Education. University of Chicago Press, 1993, p. 215.

efficiently priced than traditional marketable securities, providing an opportunity to exploit market inefficiencies through active management. The Endowment's long time horizon is well suited to exploit illiquid, less efficient markets such as venture capital, leveraged buyouts, oil and gas, timber, and real estate.<sup>50</sup>

In context of international financial vulnerabilities of early 1970 Harvard decided to manage its endowment's assets (valued at \$1.4 billion in that year) separately and independently from the treasurer's office and established Harvard Management Corporation in 1974.

Walter M. Cabot, a Harvard alumnus and senior executive at Boston's Wellington Management (investment corporation), became a first head of Harvard Management Corporation. Before that Harvard's endowment had been managed very conservatively, but consequently turned to alternative assets and complex derivatives, took similar diversification and hedging strategies. Cabot «reallocated the endowment from a largely income-oriented, blue-chip equity portfolio to a much more diversified, high-risk/high-return model stretching across asset classes and instruments not typically associated with the staid world of endowment management».<sup>51</sup> Under Mr. Cabot management Harvard's endowment not only «began trading options, futures and derivatives and lending securities from its endowment, but also created other affiliated investment entities, such as the Aeneas Group, to make high-risk direct private placements in venture capital, oil and gas partnerships, real estate, and controversial leveraged buyouts».<sup>52</sup>

Most of universities quickly adopted Endowment Model of Investing developed first of all by Harvard and Yale. Endowments relied on diversification of portfolios and placed an increasing share of its assets into high-risk/high-return, largely illiquid investments.

The patterns of Endowment Model of Investing widely disseminated throughout financial industry. «Institutional investors such as pension funds, foundations, and other financial asset managers have increasingly developed imitative investment strategies taken directly from the Endowment Model's playbook, intensifying the crowding phenomenon that has magnified volatility, enhanced risk, and inflated asset value bubbles in various corners of the capital markets».<sup>53</sup>

And finally, very special role was played endowment's tax-exemption status – it provides perverse incentives to view market volatility not as a source of risks that should be mitigated, but as a revenue-generating opportunity. Dr. Swensen believed that tax-exempt status a special advantage because, unlike taxpaying businesses, endowments can engage in «frequent trading without adverse tax consequences associated with realized gains».<sup>54</sup>

The fundamental believe is that market volatility is the source of profits, and tax-exemption encourages endowments «to trade much more actively, at a greater frequency, velocity and scale, than the average taxpaying investor could ever manage to do». In such an approach *market stability is thus not in the interests of tax-exempt nonprofits following that Model*. As Swensen explains, «Frequent rebalancing activity allows investors to maintain a consistent risk profile and to exploit return-generating opportunities created by excess security price volatility».<sup>55</sup> Under his

---

<sup>50</sup> The Yale University Endowment Investment Policy. Yale Investment Office Report, 2011, p. 6. <[http://www.yale.edu/investments/Endowment\\_Update.pdf](http://www.yale.edu/investments/Endowment_Update.pdf)> Accessed on August 20, 2012.

<sup>51</sup> Humphreys Joshua (ed.). (2010). *Educational Endowments and the Financial Crisis: Social Costs and Systemic Risks in the Shadow Banking System. A Study of Six New England Schools*. Center for Social Philanthropy Tellus Institute. Boston, Massachusetts, p.97. During Mr. Cabot tenure as chief executive officer of Harvard Management Corporation for more than 15 years its endowment's value achieved about \$5 billion.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> David F. Swensen. (2005). *Unconventional Success: A Fundamental Approach to Personal Investment*. New York: Free Press, p.197.

<sup>55</sup> Fred Rogers. (2005). *Sources of Endowment Growth at Colleges and Universities*. Commonfund Institute, April.

management Yale endowment used to rebalance its portfolio *on a daily basis at times* – provides a routine trading technique for regularly harvesting gains.

By pursuing financial gains and mitigating risk within their («long-term») portfolios, endowments did not concern about broader risks posed to the markets.<sup>56</sup> In fact, due to special frameworks and strategic relations (tax exempt status, academic aura and an umbrella of economic mentality reproduction, personal linkages and direct exchanges between and within elite circles) endowments served as pioneering, experimental practice for creation hedge funds and offshore financial practices itself. So, wealthiest university's endowments provided a new model for other endowments and institutional investors. In joint multi-dimensional cooperation with Wall Street actors such as pension funds, investment banks and other institutional investors, endowments created what numerous scholars describing as a «shadow banking system».

#### 4. The «Wall Street Rule»? Billion Dollar Endowment Club

«... all over the world, whether from sovereign wealth funds, private foundations, public or corporate pension funds, or even very wealthy individuals, we get the same question: How can we invest like Harvard and Yale?»<sup>57</sup>

As estimated by major investment consulting corporation Cambridge Associates «[o]ver the past 20 years, the leading college and university endowments, as a group, have been *the most successful* institutional fiduciary investors on the planet».<sup>58</sup>

Indeed, in this period university endowments have been at the top performers among all institutional investors. Why the U.S. elite universities endowments are the most successful investors on the planet? And what does that mean?

The growth rate of universities' endowments between 1974 and 1989 was 10.0 %.<sup>59</sup> After the collapse of the fUSSR top 20 endowments grew much quicker than economy: more than 9 % annually on a real basis between 1992 and 2005.

Since 1970s endowments of elite American universities fully integrated with Wall Street practices and transformed into most sophisticated investors in the tax-exempt sector in the world.

As we may see the fluctuations of Wall Street during crisis in 2000/2001 and 2008/2009 fully reflected in behavior and results of endowments of leading universities at Table 11.

TABLE 11

	Endowment Growth, 1999-2011 (changes in % to previous year)												
	2011/ 2010	2010/ 2009	2009/ 2008	2008/ 2007	2007/ 2006	2006/ 2005	2005/ 2004	2004/ 2003	2003/ 2002	2002/ 2001	2001/ 2000	2000/ 1999	1999/ 1998
Harvard	15,1	5,4	-29,8	5,5	19,8	13,5	15,0	17,5	9,8	-4,4	-4,7	19,8	19,8
Yale	16,3	2,0	-28,6	1,5	25,0	18,4	19,4	15,5	4,9	-1,9	6,1	25,0	25,0
Stanford	19,1	9,8	-26,7	0,2	21,9	15,4	23,0	15,2	13,1	-7,7	-4,6	21,9	21,9
Princeton	18,9	14,1	-22,8	3,6	21,0	16,4	12,9	13,7	4,9	-0,5	-0,5	21,0	21,0
MIT	16,8	5,5	-20,7	0,9	19,3	24,7	14,4	14,3	-4,2	-12,6	-5,3	19,3	19,3

<sup>56</sup> “At Harvard Management Co., Jack Meyer and his team of traders profited greatly from volatility and magnified Harvard's gains by using borrowed money, known as “leverage,” at debt-to equity ratios reported to be as high as 15 to 1.28”. Humphreys Joshua (ed.). (2010). *Educational Endowments and the Financial Crisis: Social Costs and Systemic Risks in the Shadow Banking System. A Study of Six New England Schools*. Center for Social Philanthropy Tellus Institute. Boston, Massachusetts, p. 29.

<sup>57</sup> See: Cambridge Associates' Confidential Letter to the Senate Finance Committee Regarding their Inquiry to Large Colleges and Universities. January 24, 2008, Boston, MA. <<http://www.universityofcalifornia.edu/news/article/17428>>

<sup>58</sup> Ibid.

<sup>59</sup> About 9.4 % for endowments of public universities and 10.2 % private universities. The average investment return for the period 1961 through 1989 was 8.5%. The average spending rate was 4.2%. See: Hutton Lyn, James McDiarmid, Peter Williamson and Daniel A.Wingerd. (1993). *The Growth of College Endowments: 1960-1990*. The Common Fund, p. 12.

During last two decades large endowments mastered the most aggressive and risky investment strategies and became leaders of global investment industry. *They widely use hedge funds and offshore investments.*

The returns from endowments became the biggest source of universities revenue stream. Ivy League universities depend on endowments for 25-35% of their income. And of course, very special place in that story is occupied by leaders. It is just remarkable: between 1980 and 2005 the endowments of Harvard University grew 1,508% (!), Yale endowment grew 2,176% and University of Texas grew 821%.

Since the Harvard Management Corporation creation in 1974 Harvard's endowment return annualized performance was 13.3 % before the crisis of 2008.

Yale's endowment has been even more impressive – its average annualized return is 15.6 % over last 20 years. The Harvard's achieved US\$36.9 billion in 2008 and contributed 35% of the university's budget that year.<sup>60</sup>

The growth of biggest endowments during last two decade just impressive (on that regard see Table 12).

TABLE 12

	Endowment Value in Millions of US dollars, 1999-2011 <sup>61</sup>						
	2011	2010	2009	2008	2007	2006	2005
Harvard	31,728	27,557	26,035	36,556	34,635	28,916	25,474
Yale	19,374	16,652	16,104	22,869	22,530	18,031	15,225
Stanford	16,503	13,851	12,040	17,200	17,165	14,085	12,205
Princeton	17,110	14,392	13,386	16,349	15,787	13,045	11,207
MIT	9,713	8,317	7,982	10,069	9,980	8,368	6,712
Harvard	22,144	18,849	17,170	17,951	18,854	14,256	4,363
Yale	12,747	11,035	10,524	10,700	10,085	7,198	2,571
Stanford	9,922	8,614	7,613	8,250	8,649	6,005	2,053
Princeton	9,928	8,730	8,320	8,359	8,398	6,469	2,527
MIT	5,865	5,134	5,359	6,135	6,476	4,288	1,405

At the same time the rate of endowment's annual spending (in percent) was always two to three times lower than its growth (see Table 13).<sup>62</sup>

TABLE 13

	Endowment Payout Rates, 1999-2008 in percent									
	2008/ 2007	2007/ 2006	2006/ 2005	2005/ 2004	2004/ 2003	2003/ 2002	2002/ 2001	2001/ 2000	2000/ 1999	1999/ 1998
Harvard	4,8	4,1	3,9	4,1	4,5	4,9	5,1	4,8	3,3	4,0
Yale	3,8	3,8	4,0	4,5	4,5	4,5	3,8	3,4	3,9	3,9
Stanford	5,5	4,4	4,5	4,5	4,7	5,2	4,7	3,8	4,6	5,3
Princeton	4,8	4,6	4,0	4,0	4,3	4,7	4,6	4,2	3,1	3,8
MIT	4,3	4,3	4,7	4,5	4,7	4,7	5,0	4,9	4,4	3,4

It added to remarkable growth cumulative capitalization of the funds. Endowments accumulated hundreds of billions of dollars.

<sup>60</sup> Harvard University Annual Financial data. 2009. Web resource: <<http://vpf-web.harvard.edu/annualfinancial/>>

<sup>61</sup> *Total Market Values of Endowments and Endowment Rates of Return*. National Association of College and University Business Officers and Common fund Institute Endowment Study. 2011. <[http://www.nacubo.org/Research/NACUBO\\_Endowment\\_Study/Public\\_NCSE\\_Tables\\_/Total\\_Market\\_Value\\_of\\_Endowments.html](http://www.nacubo.org/Research/NACUBO_Endowment_Study/Public_NCSE_Tables_/Total_Market_Value_of_Endowments.html)>; <<http://www.nacubo.org/Documents/research/2011NCSEPublicTablesEndowmentMarketValues319.pdf>> (Updated on March 2012).

<sup>62</sup> National Association of College and University Business Officers and Common fund Institute Endowment Study. 2008, *supra* note 47, at 246 tbl.54.



During five years before the financial crisis in 2008 the number of U.S. universities who became a member of the 'exclusive club' with endowments more than US\$1 billion has doubled to 76.

Since the beginning of 1990s the wealthiest group of colleges and universities with endowment funds of over \$500 million the cumulative **increase in spending** has been 370% in nominal and 226% in real, inflation-adjusted terms, or 24.7% and 15.1% on an average annualized basis. In inflation-adjusted dollars spending has increased about 3.25 times.

It allows Ivy League universities to pay much more for scholarships and tuition assistance, faculty salaries, renovate facilities, to develop different kind of new projects. Exactly in parallel with the collapse of fUSSR and «transition to market economy» higher education funding reallocated globally.

By that income the U.S. leading universities were able to get the best faculties, massively fund research, and to subsidize tuition for talented students. All of that highly contribute to the «pre-eminence» of the U.S. universities and expansion of their global presence.

The following five-year financial summary of Harvard Business School activity and types of its major expenditures and sources of revenue illustrates the scale and character of finances and dynamic of schools with endowment behavior.<sup>63</sup>

TABLE 14

Harvard Business School Five-Year Data Summary					
In millions for the fiscal year ended June 30					
	2011	2010	2009	2008	2007
Revenues	\$509	\$467	\$472	\$451	\$405
Expenses	456	415	438	423	375
Cash from Operations	53	52	34	28	30
Capital Investments	34	14	19	40	20
Building Debt Outstanding	103	112	119	121	108
Unrestricted Revenues	79	99	96	79	65
Endowment	2,779	2,311	2,117	2,971	2,821
Total Assets	3,528	3,087	2,826	3,684	3,500

TABLE 15

Harvard Business School Key Facts					
	2011	2010	2009	2008	2007
MBA PROGRAM					
Applications	9,134	9,524	9,093	8,661	7,438
Percent Admitted	12%	11%	12%	12%	14%
Yield	90%	89%	89%	91%	89%
Enrollment	1,860	1,864	1,809	1,796	1,806
Tuition	\$ 48,600	\$ 46,150	\$ 43,800	\$ 41,900	\$ 39,600
Average Fellowship Aid per Student	\$ 26,745	\$ 23,989	\$ 24,393	\$ 21,591	\$ 17,605
Doctoral Program					
Applications	830	931	798	595	694
Percent Admitted	5%	4%	4%	6%	5%
Yield	68%	69%	69%	81%	57%
Enrollment	132	125	120	105	103
Executive Education					
Enrollment	9,939	8,670	8,291	9,345	9,281

<sup>63</sup> Harvard Business School Annual Report. 2011.  
<<http://www.hbs.edu/about/annualreport/2011/financials/five-year.html>>

TABLE 15

Harvard Business School Key Facts					
	2011	2010	2009	2008	2007
<b>Faculty</b>					
Faculty Positions (full-time equivalents)	217	218	228	219	206
Teaching Materials	635	538	608	647	602
Research Articles	150	155	146	152	145
Books	18	29	20	24	24
<b>Staff</b>					
Staff Positions (full-time equivalents)	1,138	1,087	1,187	1,146	1,109
<b>Publishing</b>					
Cases Sold	9,764,000	9,668,000	8,334,000	8,240,000	7,785,000
Harvard Business Press Books Sold	1,665,000	1,769,000	1,478,000	2,025,000	1,882,000
Harvard Business Review Circulation	241,000	236,000	237,000	246,000	248,000
HBR Reprints Sold	3,098,000	2,946,000	2,863,000	3,123,000	3,061,000

We may see the scale of contribution of Harvard Business School into reproduction of business mentality globally: the numbers of management studies Cases, Harvard Business Press Books, Harvard Business Review Circulation and Harvard Business Review Reprints counted in millions (Table 15).

The earliest «endowed chairs» were established as early as in Roman Empire times by Aurelius in AD 176. He created one endowed chair for each of the major schools of philosophy.

By current estimations to establish only one real Endowed Professorship university need to have at least US\$10 million of funds dedicated exceptionally to this purpose.

Many college and university endowments have come under fire in recent years for investing in practices such as "land grabs" in poor countries and high-risk, high-return investment practices that led to the financial crisis.

TABLE 16

Asset Allocations for Large Endowments, Average Education Endowment, and Estimated Return from June 2008-June 2009 (in percent) <sup>64</sup>							
Endowment	Hedge funds	Dome stic Equity	Bonds	Foreign Equity	Private Equity	Real Assets	Cash
Harvard	18	11	11	22	13	26	-3
Yale	25	10	4	15	20	29	-4
Princeton	24	7	2	12	29	23	2
Stanford	18	37	10	N/A	12	23	N/A
Average Ed. Endowment	22	22	12	20	9	14	2
Estimated Return 06.08-06-09	-20	-27	6	-31	-50	-47	2

The Yale endowment achieved enormous success under Swensen's 25-year leadership, enticing many other large endowments to emulate the Yale Model.

Between June 1998 and June 30, 2008, the Yale endowment produced an annual return of 16.3%; Harvard produced 13.8%, and Princeton produced 14.9%. To put this performance into perspective, the S&P 500 during these years returned only 2.9% annually. These annual returns translated into explosive growth of the endowments during this time period: Harvard's grew to \$36.9 billion from \$13 billion, Yale's grew to \$22.9 billion from \$6.6 billion, and Princeton's grew to \$16.3 billion from \$5.6 billion.<sup>65</sup>

<sup>64</sup> Bary Andrew. (2009). Big Squeeze on Ivy League Endowments. Barron's (June 29), available at <[http://online.barrons.com/article/SB124605595751363385.html#articleTabs\\_panel\\_article%3D1](http://online.barrons.com/article/SB124605595751363385.html#articleTabs_panel_article%3D1)>.

<sup>65</sup> Bary Andrew. (2009). Big Squeeze on Ivy League Endowments. Barron's (June 29). Available at <[http://online.barrons.com/article/SB124605595751363385.html#articleTabs\\_panel\\_article%3D1](http://online.barrons.com/article/SB124605595751363385.html#articleTabs_panel_article%3D1)>.



place with assets of \$16.5 billion, reflecting growth of 19.1%, and Massachusetts Institute of Technology also received 17.9 % for that period.

As illustrated by the Tables 12-14, among the most important relations, that under formation by world's perception management now, are direct, yet not well reflected, links between endowment's size and growth and university's rank achieving in most prestigious world and national rankings.

**TABLE 19**  
**Wealthiest Endowments and University Ranking 2009**

	2009	U.S. News and World Report Rank & category 2009
Harvard	26,035	1 - National Universities
Yale	16,104	3 - National Universities
Stanford	12,040	5 - National Universities
Princeton	13,386	2 - National Universities
MIT	7,982	7 - National Universities

**TABLE 20**  
**Wealthiest Endowments and University World Ranking 2010**

	2010 endowments in US\$	U.S. News and World Report	The Times	Shanghai ranking
Harvard	27,577,404	1	1	1
Yale	16,652,000	3	10	11
Stanford	13,851,115	4	4	3
Princeton	14,391,450	2	5	7
MIT	8,317,321	4	3	4

**TABLE 21**  
**Wealthiest Endowments and University World Ranking 2011**

	2011 endowments in US\$	U.S. News and World Report	The Times	Shanghai ranking
Harvard	31,728,080	2	2	1
Yale	19,374,000	4	11	11
Stanford	16,503,606	11	3	2
Princeton	17,109,508	13	5	7
MIT	9,712,628	3	7	3

There are evident of organic and reproducing connections: big endowment is a cause of particular mode of activity and remunerated «advanced performance», then «advanced performance» is reflecting in endowment's growth results its Wall Street and public assessment and so on.

The best and the most remunerated by Wall Street institutions and related creatures captured first places in university's rankings. While by instrumental use of Wall Street and expanded accumulated financial wealth they are going up and up, and the gap with the rest of world's university population is widening dramatically.

## 5. The Wall Street Power Projection

### Wall Street culture reproduction by Re-formatting Universities?

The degree and depth of Wall Street influence on institutional development of leading American universities is difficult to overestimate. It is multidimensional. The types of worldviews and societal relations of Wall Street culture' that mimetically introduced and mastered at the universities through different «financially-linked» practices fundamentally impacted on reproduction of academic culture and institutional integrity of universities.

In the complex web of relations of world societal production and reproduction Universities in fact became, in some dimensions still latently but in principle explicitly, a substantial part of the **global** (however not yet totally-integrated) **intellectual-informational-financial industry**.

We will briefly touch just most obvious and explicit relations.

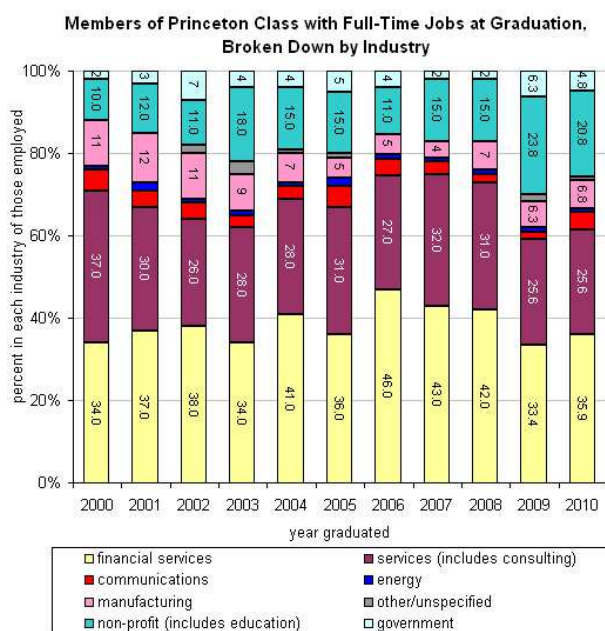
There is deep-rooted tradition of permanent flows of new graduates to Wall Street lucrative job market. That is where the most ambitious graduates of elite universities may face their money-management-money-making-get-quick-rich aspirations. As usual there is extremely sharp competition – about 500 applicants per new job opening at leading Wall Street corporations (hedge funds etc.).

Due to crisis and public critique of money manager's capitalism some of the top schools started to guide their graduates from Wall Street and direct them into public service. For example Drew Gilpin Faust, the president of Harvard University at the eve of crisis in 2008, even give a speech to graduating students asking them to resist against Wall Street «recruiting juggernaut». Another universities provide financial support to graduates who go into public service. However, the mega trends and basic relations not changed.

The flow of top-tier Ivy League and other leading universities graduates (from UC Berkeley and Stanford etc.) entering finance and related jobs is just tremendous.<sup>69</sup>

Let look at diagrams representing proportions of graduates entering finance jobs in Ivy League universities. It is in yellow. Remember we are looking at Harvard, Yale and Princeton – universities that hold historically richest and the most refined in terms of financial engineering (speculative) techniques endowments in the world.

**TABLE 22**



The biggest share of new Wall Street cadres came from Princeton University.<sup>70</sup> There are 35.9 percent of graduates who went into finance in 2010. That is much lower than the peak of 46 percent in 2006 before the crisis. While combining with services, such as consulting that mostly work for and around finance, this share will raise to 73 % in 2006 and to about 62 percent in 2010.

<sup>69</sup> We use here data gathered by New York Times journalist Catherine Rampell. See: Rampell Catherine. (2011). *Out of Harvard, and Into Finance*. The New York Times. December 21, 2011. <<http://economix.blogs.nytimes.com/2011/12/21/out-of-harvard-and-into-finance/>>. Source: Harvard Office of Career Services; Princeton Office of Career Services; Beverly Waters, Office of Institutional Research, Yale University. June 2011. Note: Industry categories with fewer than 1 percent of employed students are excluded.

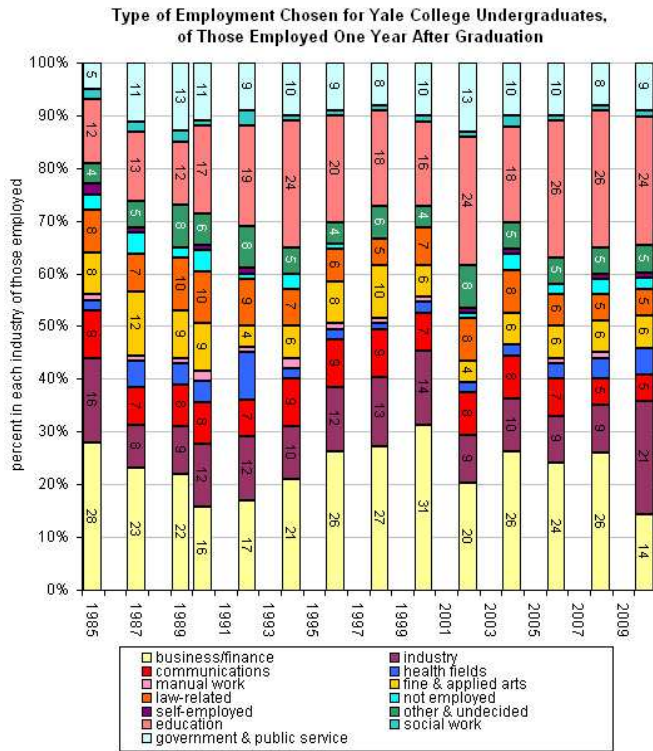
<sup>70</sup> This university world famous for best its school of mathematics.

Yale University provides more differentiated information on employed students' career choices. Despite of global crisis and high level of unemployment the class of 2010 of Yale University graduates entered job market just fine.

In Yale data base this category titles as industry and counted between 14 percent in 2000 and 21 percent in 2010.

So, each year roughly between 45 and 35 percent of Yale University graduates enlarge «labor forces» of Wall Street.

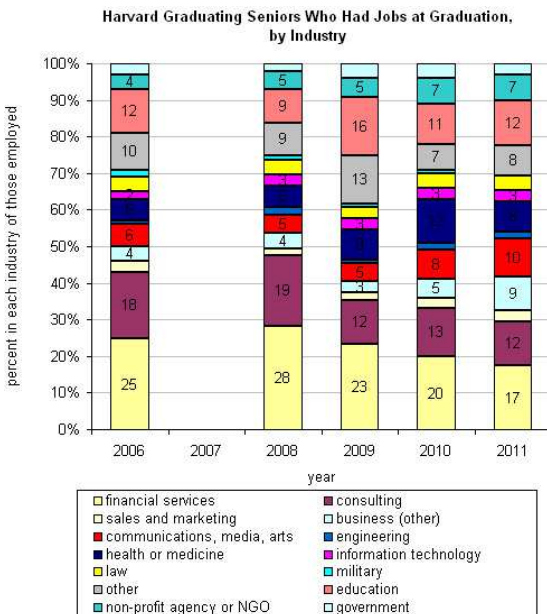
TABLE 23



Harvard University.

As we can see the major area for Harvard University graduates career start is predominantly finance.

TABLE 24



In 2010 17 percent of new graduates entered Wall Street.

Together with consulting it was 25 percent in 2010.

The peak of newly employed Harvard graduates for financial services was 28 percent in 2008.

In 2008 jobs in finance and consulting received 47 percent of graduates.

It is important to note that the primary mission of consulting services is «profit-maximizing» and «best practice disseminating».

That make this activity just another, knowledge-intensive version of «financial economy».

Newly started consultant with graduate level usually makes \$150000 to \$200000, including bonus. It is quite similar to core and most lucrative types of making-more-money jobs at Wall Street.

In time of crisis consulting remains among the most popular career choices at elite universities.

At the same time actually all of the consulting industry's top corporations like Boston Consulting Group, Bain & Company, McKinsey & Company etc are functioning as a network serving Wall Street interests by supplying high cadres and executive education, and via sending to universities and business schools of «real economy professors» of business. Consulting industry influence on traditional universities practices. It works as powerful co-producer of American culture and thinking of global business elites. It is a laboratory of business language and idiomatic clichés such as «outside the box», «bandwidth», «by in», «win win» and soon.

As classical products of top-tier Ivy League universities and Wall Street consulting subsidiaries should be seen U.S. presidential candidate of the year 2012 Mr. Mitt Romney.

After graduation at Harvard Law School and Harvard Business School he passes through extensive practical training at Wall Street and affiliates businesses. Mr. Romney first entered the Boston Consulting Group, where he achieved a position of chief executive officer. Later he worked at Bain & Company consulting corporation and became vice-president. Next step was co-funding Bain Capital, extremely profitable private equity investment firm. Finally he spent record sum of \$6 million and became elected governor of Massachusetts in 2002. According to analysis his financial disclosure forms Mr. Romney has net wealth between \$150,000,000 and \$250,000,000.

There are as well integrated and permanent **interflows of high cadres** between investment offices at university's campuses and highest positions at Wall Street. Primarily from prominent hedge-fund investors and corporations as Goldman Sachs.

The Wall Street cult of the Chief Investment Officer dramatically echoed in the rise and institutionalization of the position of Academic Finance Officers.

Wall Street speculation and risk culture and compensation policies highly influenced not only on the Endowments practices and leadership, but on entire mode of campuses strategic management and academic atmosphere.

To attract elite and most promising graduates from Ivy League Universities Wall Street have to provide opportunities and promising conditions.

Probably it is difficult to find better figure combines all kind of strategic linkages and relations representing institutional integrity of Wall Street, «Global Economy» and Harvard. Let us memorize who is Mr. Larry Summers.

At the moment he is Emeritus of Harvard University, and hold a position of Charles W. Eliot University Professor of Harvard University and the Weil Director of the Mossavar Rahmani Center for Business & Government at the Harvard Kennedy School.

Mr. Larry Summers is former President of Harvard University, ex-Treasury secretary under President Clinton, Undesecretary of the Treasury for International Affairs and Vice President of Development Economics and Chief Economist at the World Bank, and finally he worked as director of the National Economic Council in the Obama administration. All of his life-long activity may serve as an exemplary of service to financial industry and Wall Street by and through using Harvard as a vehicle and central instrument of this practice. Summers was directly involved in some of the global and most controvecial economic policy decisions of the past half century.

Despite «free fall» of economy, unemployment, unprecedented debt growth Wall Street not just continue, but expanded its practices – as universities reproduce their courses and cadres supply for financial engineering, global derivatives business and other financial management money-making techniques.

The «*National Commission on the Causes of the Financial and Economic Crisis in the United States*» headed by the Member of the U.S. Congress Phil Angelides with quiet

disappointment stated that there are no any signs of principle changes of Wall Street global-risks-and-crisis-generating activity.<sup>71</sup>

For, although the net profit of Wall Street (or U.S. financial industry) lowered during the peak time of crisis in 2008 and 2009,<sup>72</sup> the securities sector reported new highs profit even as eralier as in 2009.

Sphere not juet remains most highly paid. In times of crisis it increases remunerations. «The securities industry has reported record profits and is once again distributing large bonuses. Just for those who work in New York City, bonuses at Wall Street securities firms in 2009 were \$20.3 billion, up 17% from the year before, with «average compensation [rising] by 27 percent to more than \$340,000». <sup>73</sup> After reporting \$54 billion of losses during 2007 and 2008, the New York State Controller reported that in 2009, «industry profits reached a record \$61.4 billion—almost triple the level of three years earlier». <sup>74</sup>

In such formative context to attract the most experienced and brave Wall Street financial sharks (hedge-fund managers and other type of professionals) universities have to provide special opportunities and promising conditions. In order to keep pace with the level of its excessive compensation at Wall Street, universities established for their CIO the highest compensations on campuses.

**The Wall Street's mentality, lifestyle, moneymaking ideals and compensation culture penetrated to institutional structures of higher education.**<sup>75</sup>

It is now institutionalized practice that academic CIOs, finance and investment officers, and other senior administrators at leading universities now regularly compensated at levels ranging *from 10 to 1,000 times* the average university's employee.

This phenomenon very well demonstrated by the data of Harvard Management Corporation practices reports prior to the crisis – at the Table 25.<sup>76</sup>

TABLE 25

Harvard University – 10 Highest Administrative Salaries Paid since 2000				
Name	Position	Pay in \$	1 Year	
Maurice Samuels	Senior VP, International Fixed Income, Harvard Management Co.	35,099,300	2003	
David R. Mittelman	Senior VP, Fixed Income, Harvard Management Co.	33,979,230	2003	
David R. Mittelman	Senior VP, Fixed Income, Harvard Management Co.	17,395,300	2002	
Jeffrey B. Larson	Senior VP, International Equity, Harvard Management Co.	17,360,300	2002	
Jeffrey B. Larson	Senior VP, International Equity, Harvard Management Co.	17,256,161	2003	
Maurice Samuels	Senior VP, International Fixed Income, Harvard Management Co.	15,867,650	2002	
Jack R. Meyer	President, Harvard Management Co.	7,195,680	2004	
Mohamed El-Erian	President, Harvard Management Co.	6,500,000	2007	
Stephen Blyth	Managing Director-Int'l Fixed Income, Harvard Management Co.	6,373,750	2008	
Marc Seidner	Managing Director-Domestic Fixed Income, Harvard Management Co.	6,288,750	2008	

<sup>71</sup> Angelides Phil, Brooksley Born (et. all.). (2011). *The Financial Crisis Inquiry Report. Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States*. US Government Printing Office: Washington D.C.

<sup>72</sup> «Total financial sector profits peaked at \$428 billion in 2006 and then fell to \$128 billion in 2008, the lowest level since the early 1990s. They have since rebounded in 2009 and 2010, boosted by low interest rates and access to low cost government borrowing. Financial sector profits were \$242 billion in 2009 and reached an annual rate of \$369 billion in the fall of 2010». In Angelides Phil, Brooksley Born (et. all.).

<sup>73</sup> Goldman Sachs CEO Lloyd Blankfein received largest bonus of \$67.9 million in 2007. In 2009 he received only \$9 million. *Wall Street Bonuses Rose Sharply in 2009*. New York State Comptroller Thomas P. DiNapoli press release, February 23, 2010.

<sup>74</sup> N.Y. State Comptroller Thomas P. DiNapoli. *Economic Trends in New York State*, October 2010.

<sup>75</sup> Baker Dean. (2009). *Plunder and Blunder: The Rise and Fall of the Bubble Economy*. Sausalito, California: PoliPointPress, pp.132-136; Montell Gabriela. (2009). *Salary Cap for Bailout Recipients Fires Up Critics of College Presidents' Pay*. The Chronicle of Higher Education. February 6, 2009.

<sup>76</sup> Chronicle of Philanthropy Executive Compensation Survey; Chronicle of Higher Education; IRS 990 Forms. Compensation may include one-time severance packages or deferred compensation.



Certainly, pay checks decreased and slightly changed at times of Global Crisis. But the proportion of pay for Chief Investment Officers in relation to other categories, including professors, scholars and research workers remains similar. Let see the list of highest-paid chief investment officers for fiscal year 2010<sup>77</sup>.

Again we will find there representatives of universities held richest endowments and most tightly interwoven with Wall Street practices: number first is Ms. Jane Mendillo, president and CEO of Harvard Management Corporation with total compensation of \$4.75 million. She oversees the investments of the \$32 billion Harvard University endowment. Second following well famous Dr. David F. Swensen. He continues his service as chief investment officer of the \$16.7 billion Yale University endowment. His total compensation was \$3,875,940 (he received a bonus of \$3-million on top of his \$781,460 base salary). Third represents another top-tier Ivy League university – Nirmal Narvekar, president and CEO of the \$6.5 billion Columbia University endowment, received \$3.45 million. And number four is Ivy League university representative Scott C. Malpass, CIO of the \$5.2 billion University of Notre Dame endowment. He got \$2.06 million.

The transfer of top cadres and reinforcement of universities financial management capabilities particularly activated in crisis time.

For, in late 2007 Harvard Management Corporation was headed by Robert S. Kaplan, a professor of management practice at Harvard Business School and a former vice chairman at Goldman Sachs.

Another Wall Street actor transferred to Harvard in the summer of 2008 right before the raise of the global financial crisis. Edward C. Forst left Goldman Sachs and became the *Harvard's first executive vice president*, overseeing finance, administrative and human resources divisions, reporting directly to Harvard's new president Drew Faust, and serving as a chief liaison between Harvard Management Corporation and the president's office. Before coming to Harvard, Forst had been very well compensated for his service to Goldman Sachs.<sup>78</sup>

According to news reports and SEC filings, Edward Forst was the fifth highest paid executive at Goldman Sachs, making nearly \$50 million in total compensation in 2007. This is a sign of just how pervasively finance had come to dominate Harvard's culture and operations.

### **Deeply-rooted material and strategic relations of Wall Street world and University & Academia reproduction.**

In that context what is the deep structured material relationship between the Wall Street stock markets, professorship work and academic job market? On surface we may observe that failure at financial markets and lowering representative indexes leads to reduction of funds and lowering status of academic jobs. It is just simple particularly in economics. To certain degree the crashes and «markets» failure at Wall Street may throw shadow on knowledge production capability of university academics.

At the same time as soon as value of endowment's investments decreased echoing Wall Street downturns it directly reflecting in amount of funds available for university departments, research projects and for particular endowed professorships. And vice versa if Wall Street going up it reflects in broadening resources available for professors, new scholarships and research grants etc.

---

<sup>77</sup> As showed by recent study of executive search firm Charles Skorina & Co. See report by Kozlowski Robert. (2011). Endowment execs top pay list for tax-exempt institutions. Pension & Investment online magazine. November 7, 2011 <<http://www.pionline.com/apps/pbcs.dll/article?AID=/CO/20111107/DAILYREG/111109914>>

<sup>78</sup> It is important to note that Goldman Sachs deeply involved into for-profit higher education sector in U.S. and worldwide. For, in 2006 Goldman Sachs and Providence Equity Partners bought Education Management Corporation (41% of its shares going to Goldman) with portfolio of 70 colleges enrolling just 72,000 students for over \$3.4 billion dollars. EMC revenue in 2011 was slightly less than \$3 billion.

For, in this way Wall Street produce resources for university's internal production processes and job market for graduates as highly skilled knowledge workers. Wall Street maybe considered as biggest and the most lucrative «job market» on the planet. So, Wall Street vulnerability means uncertain job perspectives for new graduates. There are just less jobs for skilled «quants» – mathematics, computer science, MBA's and economics. If Wall Street is hiring less that may reduce a number of applicants and students at universities. It may push faculties and university to compete for new applicants and research funds, and detract them from concentration on advancing knowledge. In such a way universities and Wall Street tightly bounded.

In these strategic relations of production and reproduction of knowledge, expertise and graduates by universities deeply intertwined with Wall Street and latently, through mediated infrastructures but now largely commodified. There are relations of extracting of rent's returns from both sides and on a global scale.

The trend and aspiration to globalize this relation of rent extraction all over the world is among major forces for globalization of finance and American university – as a mode of knowledge and knowledge workers production, as institutional organization, in terms of curriculum and extracurricular students and professors activity etc.

**Університет та майбутнє: вища освіта, світова економіка, що глобалізується, і «криза».**

**КОВРИГА Олександр Володимирович**, кандидат економічних наук, директор Центру міждисциплінарного прогнозування суспільного розвитку, Харківський національний університет ім. В. Н. Каразіна, заступник головного редактора журналу «Соціальна економіка».

В статті розглянуто комплексну реальність взаємозв'язок і взаємовідносин між сферою вищої освіти і світової економікою, що глобалізується, та їх кризою. Показано, що антикризові заходи, які здійснюються з 2008 року будуть залишатися фіктивними і контрпродуктивними поки не враховуватимуть глибокі матеріальні структури і відношення, що підлягають світу «фінансових» і «економічних» відносин. Ці відносини та їх структура існують і відтворюються лише завдяки «антропо-виробництву» – роботі сфери вищої освіти і світу професій. Для подолання глобальної кризи необхідно вийти за межі діючих структур світової політичної економії, розкрити сутність глибоких зв'язок університетського світу, глобальних фінансів та «економічної освіти», забезпечити їх перепроєктування та перезаснування.

*Ключові слова:* університет, фінансіалізація, глобальна економіка, фінансово-економічна криза, відтворення, економічна освіта.

**Университет и будущее: высшее образование, глобализирующаяся мировая экономика и «кризис».**

**КОВРИГА Александр Владимирович**, кандидат экономических наук, Директор Центра междисциплинарного прогнозирования общественного развития, Харьковский национальный университет им. В. Н. Каразина, заместитель главного редактора журнала «Социальная экономика».

В статье рассмотрена комплексная реальность взаимосвязей и взаимоотношений между сферой высшего образования и глобализирующейся мировой экономикой и их кризисом. Показано, что антикризисные меры, предпринимаемые с 2008 года будут оставаться фиктивными и контрпродуктивными пока не примут в расчёт глубокие материальные структуры и отношения подлежащие миру «финансовых» и «экономических» отношений. Эти отношения и их структура существуют и воспроизводятся лишь благодаря «антропо-

производству» – работе сферы высшего образования и мира профессий. Для преодоления глобального кризиса необходимо выйти за рамки действующих структур мировой политической экономики, раскрыть существо этих глубоких связей университетского мира и глобальных финансов, и «экономического образования» и обеспечить их перепроектирование и переучреждение.

*Ключевые слова:* университет, финансиализация, глобальная экономика. финансово-экономический кризис, воспроизводство, экономическое образование.

**University and the Future: *higher education, globalizing world economy and «crisis».***

KOVRIGA Alexander, doctor of economics, director of the Center for Interdisciplinary Social Forecasting, Deputy editor of Journal “Social Economics”, V. N. Karazin Kharkov National University.

The main task of this paper is to start the discovering of complex reality of interwoven links and relations between the sphere of higher education, globalizing world economy and their «crisis». All current anti-crisis measures will remain fictitious and counterproductive until they take into account deep material structures and relations that underlie the world of «financial» & «economic» relations and exchange & transaction. These relations and their structures produce and reproduce themselves by financial-economic transactions. For existence and reproduction of these relations they require «antropo-production» activities in functions of higher education and professions. In order to overcome the «crisis», we must move beyond the world political economy, we need to disclose these deep structures and relations (of university, world economy and «economic education») and set our world free for development through thoughtful redesign and reconstruction of these structures.

Надійшла до редколегії 20.11.2015 р.